

SOME ASPECTS OF NOMINALISATION IN HAUSA

by

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ABSTRACT.

This thesis presents part of the syntax of Hausa within the framework of Transformational Generative Grammar, the specific area investigated being various aspects of nominalisation.

After a theoretical introduction chapter 1 gives an analysis of the Hausa complement system in terms of embedding a sentence within an NP.

Chapters 2, 3 and 4 analyse in some detail four different kinds of nominalisation and present evidence in support of Chomsky's lexicalist hypothesis i.e, that at least some such nominals should be entered directly in the lexicon rather than be transformationally derived from underlying sentences.

There follow three appendices: one summarising and exemplifying the phrase structure rules presupposed in the preceding analysis; one giving a selection of the main transformational rules discussed; one listing a representative sample of verbs with their different complementation possibility

The thesis closes with a bibliography of references cited.

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INTRODUCTION

The phenomenon of nominalisation has been frequently looked into within the framework of Transformational Generative Grammar ⁽¹⁾ since Chomsky (1957)⁽²⁾ cited the relationship of the ambiguous phrase "the shooting of the hunters" to either of the two sentences:

"The hunters shoot X" or

"X shoot the hunters"

as evidence in favour of a transformational approach to syntactic analysis. "Hunters" can be understood as the subject of the verb as "lions" is in "the growling of lions" or as the object of the verb as "flowers" is in "the raising of flowers". This ambiguity cannot be adequately explained on the level of phrase structure or Immediate Constituent Analysis because all these phrases are represented (at PS level or ICA) as "the- V + ing - of- NP". But we can adequately explain the ambiguity transformationally. To account for the interpretation of "the shooting of the hunters" analogous

(1) Some knowledge of the elements of Transformational Generative Grammar as in Syntactic Structures and Aspects of the Theory of Syntax by N. Chomsky is presupposed.

(2) Noam Chomsky: Syntactic Structures.

that of
 to "the growling of lions", we can set up a transformation which rewrites any sentences of the form $(NP - V)_S$ as $(the - V - ing - of - NP)_{NP}$; and to account for the interpretation of "the shooting of the hunters" analogous to ^{that of} "the raising of flowers" we can set up a transformation which rewrites sentences of the form $(NP_1 - V - NP_2)_S$ as $(the - V - ing of - NP_2)_{NP}$. Thus the first transformation will rewrite the sentences "the hunters shoot" and "the lions growl" as "the shooting of the hunters" and "the growling of lions" respectively and the second transformation will transform "X shoot the hunters" and "X raise flowers" to "the shooting of the hunters" and "the raising of flowers" respectively.

The origin of the ambiguity in "the shooting of the hunters" is the fact that the relation of "hunters" to "shot" differs in the two underlying sentences. We do not have this kind of ambiguity in "the growling of lions" or "the raising of flowers" because neither "X growls the lions" nor "flowers raise X" is a grammatical sentence in English.

Lees (1) extended this form of transformational analysis in his treatment of English nominalisations and assumed that action nominals such as the underlined words in 1 and 2 below:

(1) Lees : Grammar of English Nominalisations (1960).

1. The committee's appointment of John.
2. The committee's objection to John.

and agentive nominals such as the underlined nominals in

3 - 6 :

3. He is the seller of the car.
4. He is the salesman.
5. He is the cooker of the meat.
6. He is the cook.

are derived transformationally from "the committee appoints John", "the committee objects to John", "he sold the car", "he sells cars", etc., etc..

Further, Rosenbaum⁽¹⁾ extended this transformational analysis to complement structures of the type exemplified by:

7. John condescended to go.
8. John wants to go.
9. John forced Mary to kiss him.
10. ~~John knows that Bill is a good boy.~~
John knows that Bill is a good boy.

etc. where the sentence is embedded as either part of the VP or the NP.

Since these extensions of the theory were made various modifications have been suggested. Firstly the existence of the VP complements⁽²⁾ has been called into question and secondly the validity of a transformational analysis for nominals of the kind Lees deals with has been put into doubt.

(1) Rosenbaum : Grammar of English Predicate Complement constructions (1967). (2) cf Rosenbaum op cit introduction.

This thesis has two aims : to produce a theoretically rigorous description of a small part of the grammar of Hausa; to cast light on the two theoretical problems mentioned above.

The first chapter gives an account of the complement system in Hausa and in as much as there is no motivation for setting up a VP complement of any kind provide negative evidence for restricting complementation to the NP.

The remaining chapters describe the various nominals in Hausa and provide direct evidence for the so-called "lexicalist hypothesis". But to understand this it is necessary to review what is meant by this term.

Chomsky (1967) ⁽¹⁾ challenges Lees' assumption and puts forward another hypothesis for the formation of nominals. The main difference between Chomsky's position and Lees' is in the treatment of the derived nominals (e.g. proof cf P below). There is no controversy over the gerundive nominal (e.g. proving) - both Chomsky and Lees agree that the latter is transformationally derived from a base sentential form.

(1) Chomsky : Remarks on Nominalisation; Readings in English Transformational Grammar (1970) edited by Jacobs and Rosenbaum.

Chomsky's position is that transformations are not the appropriate mechanism for getting the derived nominal. He suggested that the derived nominal be entered directly in the lexicon with its own idiosyncratic features.⁽¹⁾ His three main reasons for differentiating between the derived nominal and the gerundive are based on the three differences between the two as regards: (1) their respective productivity (2) the semantic relation of the nominal to the underlying verb and (3) the internal structure of the whole NP. Specifically, the gerundive nominal can be formed freely from sentences and the semantic relationship between the preposition and the gerundive nominal is also regular. The gerundive nominal does not appear to have the internal structure of a noun phrase.

The derived nominal however, is quite different from the gerundive in all these respects. There are far more restrictions on the formation of derived nominals than there are on the formation of gerundive nominals. For example, we can have the gerundive

(1) We must remember that during Lees' time the theory of T.G.G. had not developed sufficiently to offer any alternative to a transformational derivation for both types of nominalization because there was no explicit theory of the lexicon.

constructions of 12 from 11 but not 13 :

11. (a) John is easy to please.
 (b) John is certain to win the prize.
 (c) John amused the children with his stories.

12. (a) John's being easy to please.
 (b) John's being certain to win the prize.
 (c) John's amusing the children with his stories.

13. (a) *John's easiness to please.
 (b) *John's certainty to win the prize.
 (c) *John's amusement of the children with
 his stories.

There are however, some derived nominals that are superficially similar to the ones in 13 which pair with the gerundive nominal e.g. 14 versus 15 below:

14. (a) John's eagerness to please.
 (b) John's certainty that Bill will win the prize.
 (c) John's amusement at the children's antics.

15. (a) John's being eager to please.
 (b) John's being certain that Bill will win ...
 (c) John's being amused at the children's antics.

We must explain why ^{the} examples of 13 are ruled out although those of 14 are allowed. ~~in way (d) certain~~

Regarding semantic regularity, the derived nominal's relation to the base form is not regular in the same way as the semantic relation of the gerundive nominal to the base form is. The derived nominal has its own idiosyncratic features in addition to the basic semantic features it shares with the base form (verb). Take for example such nominals as belief, doubt, conversion, permutation, activities, specifications, etc, etc, with their varied semantic relation to the verbs. If we were to accomodate these facts transformationally we would have to assign a range of meaning to the base form and say that with certain semantic features it nominalizes and with others it does not. And this will then grossly affect the hypothesis that transformations do not affect meaning.

The third major difference cited by Chomsky between the nominals is that only the derived nominal has the structure of a noun phrase. Thus we can say "the proof of the theorem" but not "the proving the theorem"; or we can qualify the derived nominal with an adjective like any noun phrase e.g. "John's unmotivated criticism of the book" but not "John's unmotivated criticizing the book". The derived nominal can pluralize but the gerundive nominal cannot e.g. "John's three proofs of

the theorem" but not "John's three proofs the theorem". On the other hand only the gerundive nominal can take aspect : "John's having proved the theorem" to which there is no analogous construction containing a derived nominal.

It is because of these contrasts between the two types of nominal that Chomsky treats them differently. He adopts the transformationalist position with the gerundive nominal which can be produced freely from propositions and maintains a close semantic relation with the base form and, moreover, retains the internal structure of a sentence rather than of a noun phrase; and he adopts the lexicalist position with regard to the derived nominal whose idiosyncrasies can be explained more appropriately in the lexicon than they can transformationally.⁽¹⁾

Evidence comparable to that which Chomsky adduces for English will be brought forward for Hausa.

(1) cf Aspects (P.87-) " all properties of a formative that are essentially idiosyncratic will be specified in the lexicon". cf his footnote 16 : "Recall Bloomfield's characterization of a lexicon as the list of basic irregularities of a language (Bloomfield 1933 P.271). The same point is made by Sweet (1913 P.31) who holds that "grammar deals with general facts of language, lexicon with the special facts."

CHAPTER 1.

NP COMPLEMENTATION

The object of sentence 16 below is a simple NP. Now if we compare 16 with sentences 17 - 20 it will be clear that what follows the verb in 17 - 20 is also a kind of object and as such may also be analyzed as a kind of NP :

16. Aúdu yá nàa sòn làabaarin
Audu likes the story
17. Aúdu yá nàa sòn rùbùutun wásiikaa
Audu likes letter-writing.
18. Aúdu yá nàa sòn rùbùutà wásiikaa
Audu likes writing letters.
19. Aúdu yá nàa só(n) ⁽¹⁾ yá rùbùutà wásiikaa
Audu wants to write a letter.
20. Aúdu yáa sán(ii) ⁽²⁾ céeewáa Gárba yáa rùbùutà wásiikaa
Audu knows that Garba has written a letter

(1) Some verbal nouns such as soo take the genitive link -n when they are followed by a non-sentential object i.e. a common noun like laabaarin story, a verbal noun e.g. kacmaawaa "returning", or a pronoun. But the genitive link is optional with such verbal nouns when they are followed by a sentential object.

Examples of non-sentential objects:

Audu ya nàa son laabaarin Audu likes the story

fn (1) cont. on P. 14.

fn (2) on P. 14

The objects of sentences 17 - 20 are special kinds of NP which have certain characteristics which make them different from the simple NP object of 16: the objects of sentences 17 - 18 are nominals derived from a verb with which they still bear a close semantic relationship while the objects of sentences 19 and 20 consist of complete sentences. The items occurring as objects in sentences 17 - 20 are various instances of nominalisation in Hausa.

I shall assign the following simplified deep structures to sentences 16 - 20: cf. Appendix A. for the P.S. rules presupposed.

(1) cont.

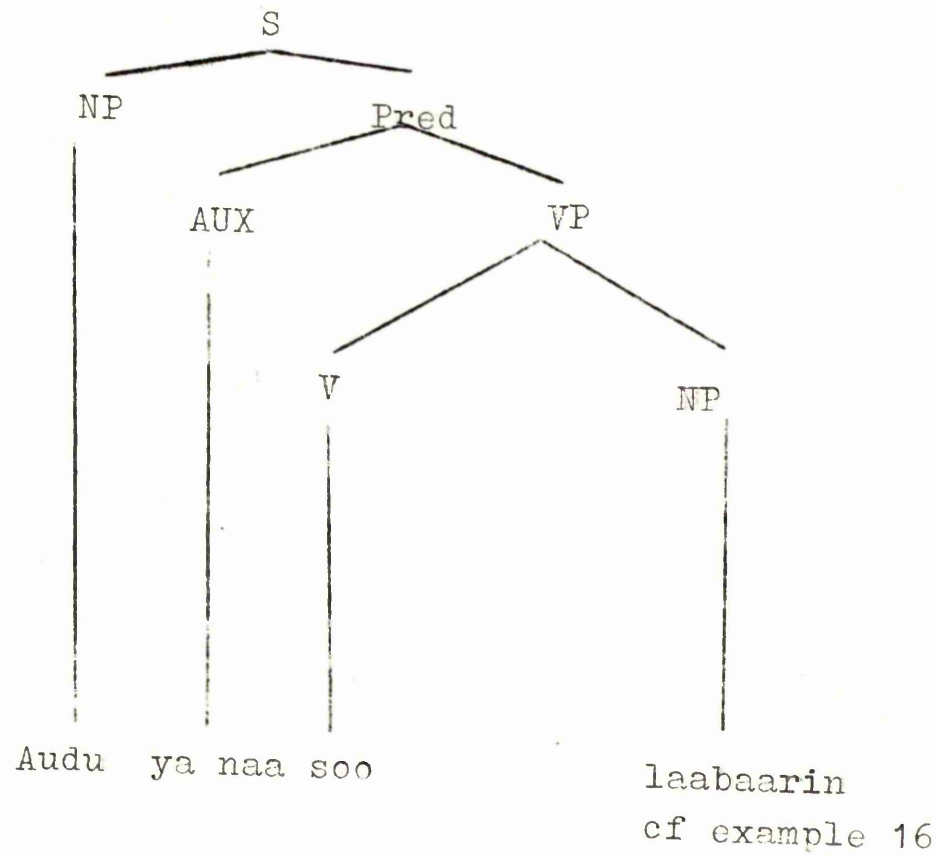
ya naa son koomaawaa - he wants returning

ya naa son sa - he likes him/it.

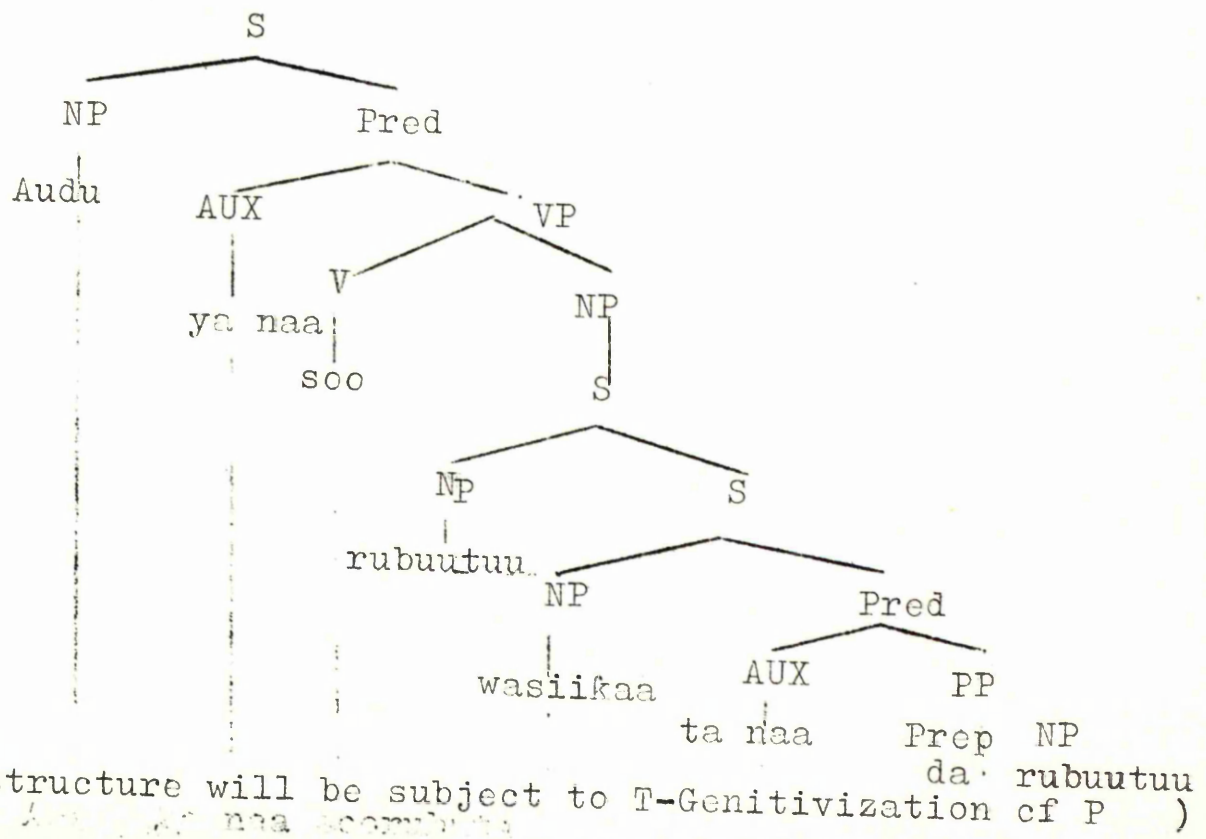
The first person singular pronoun is the only odd pronoun in this respect : instead of ya naa son na we get ya naa soo naa " he likes me". Note also that this pronoun differs from the other object pronouns in its tone and vowel length - all the other pronouns have a short vowel and a low tone while the first person singular pronoun has a long vowel and a high tone.

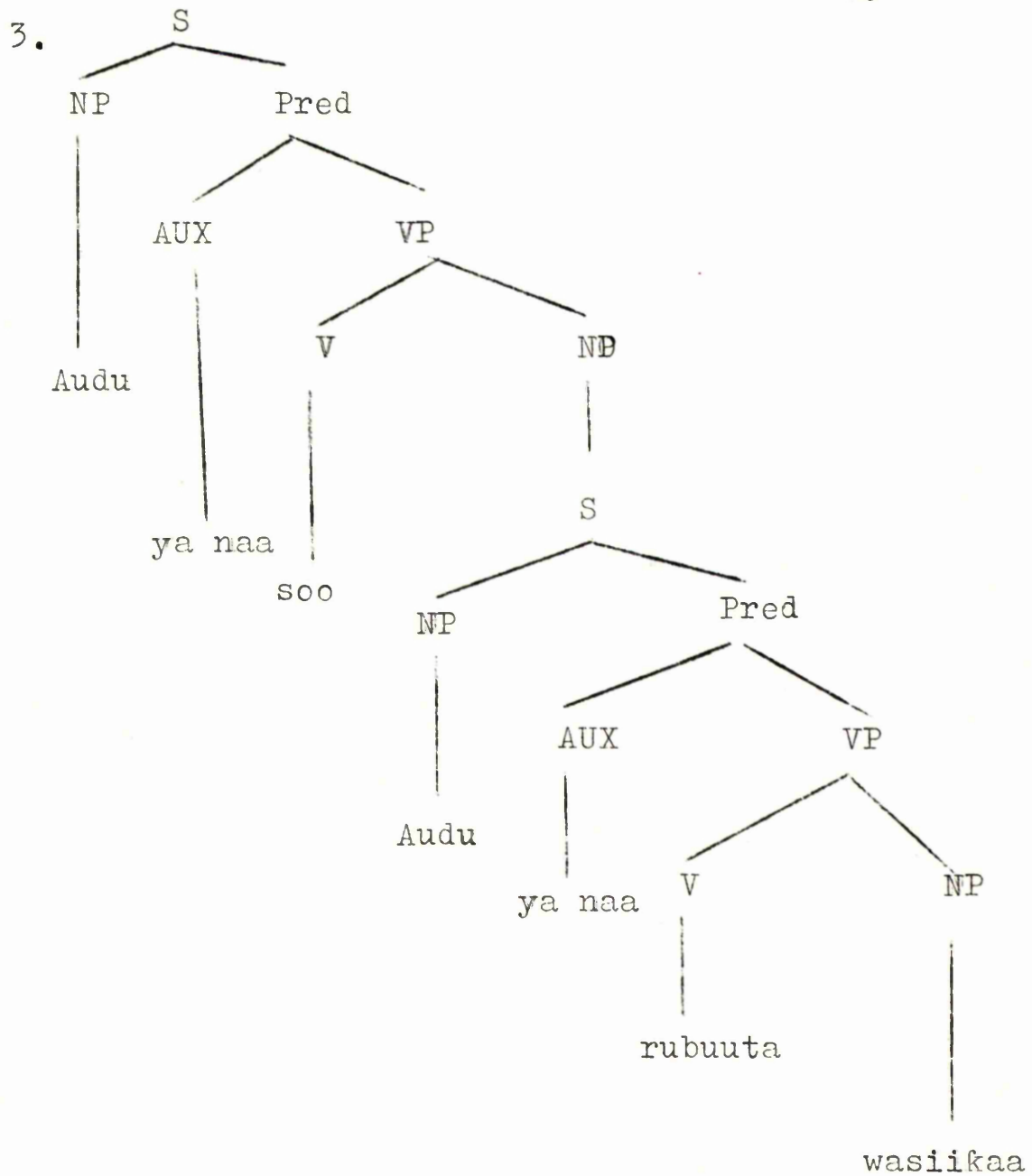
(2) The verb sanii "to know" drops its final vowel -ii obligatorily with non-sentential objects optionally with sentential objects e.g.: yaa san shi he knows him, yaa san(ii) ceewaa ya naa zuwaa - he knows that he is coming.

1.



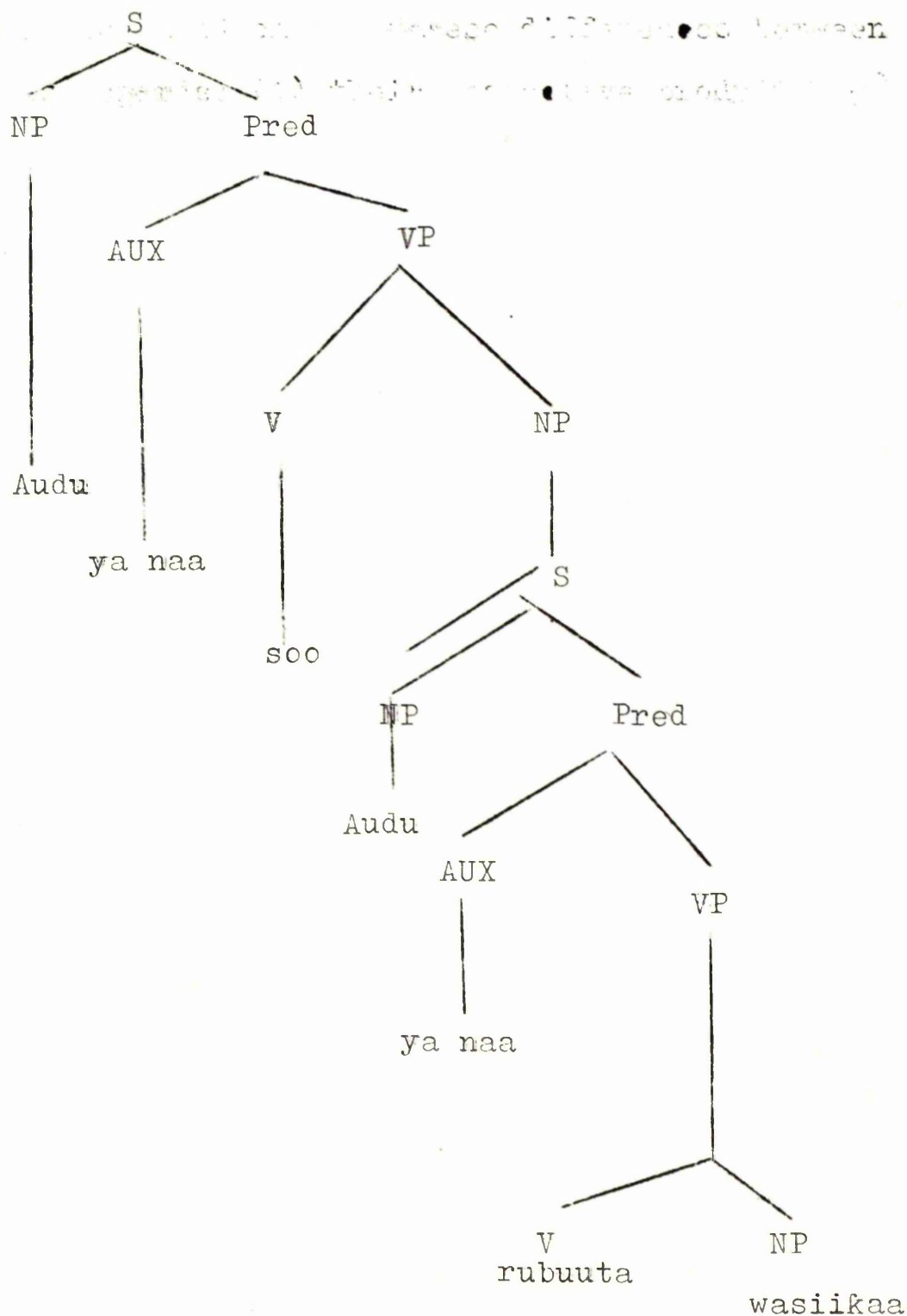
2.



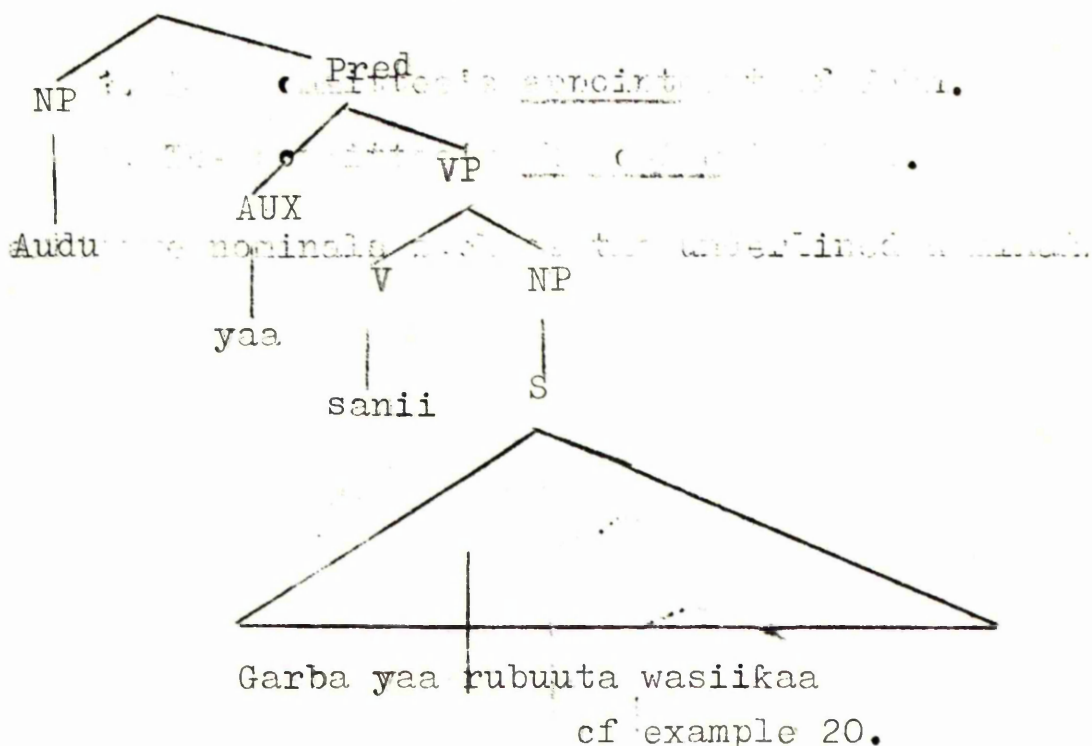


cf example 19.

... directly by the ... and ...
 ... for
 ... the ... and the
 ... differences between
 ...



cf example 19.



The two types of nominalisation exemplified in 19 and 20 are both instances of noun phrase complementation. I shall call them Subjunctive Complement and Ceewaa - Complement respectively. My object in this section is to try to show the necessity for rewriting an NP as an S in Hausa (and to show further that VP complementation does not exist in Hausa).

Ceewaa-Complement:

Ceewaa-complements, like most nouns in Hausa can function as:

(a). objects of one-object verbs e.g.

21. Audu yaa san(ii) ceewaa Garba yaa koomoo
Audu knows that Garba has returned

22. Aúdù yáá sán mágánàr
Audu knows the story

(b) as second objects of a two-object verb e.g.

23. Aúdù yáá sánár dà nii céewáa Garbà yáá kóómoo
Audu informed me that Garba has returned

24. Aúdù yáá sánár dà nii mágánàr
Audu told me the story

(c) as subjects e.g.

25. Ceewaa Audu yaa daawoo yaa baa ni maamaakii
That Audu has returned has surprised me

26. làabaarin yáa báa ni màamaakii
the story has surprised me

There is also a number of patterns of behaviour which are characteristic of other NP's which are also found with ceewaa-complements e.g.

They can take the anaphoric or referential 2n/-r or din e.g.

27. céewáa zaa sù gáyàa wà sàrkí -n/dín báì dàmée ni ba
the fact that they are going to tell the king
does not worry me

They can be modified by relative clauses e.g.

28. ceewaa zaa su gayaa wa sarkii din da ka yi

bai daamee ni ba

the fact that they are going to tell the king
as you have said does not worry me.

The anaphoric particle in 27 and 28 may seem to qualify only the simple noun which they immediately follow (i.e. sarkii "the king") but what they actually qualify is the whole embedded sentence i.e. the ceewaa complement itself. This can be justified by example 29 below where the noun shari'aa "administering of justice" to which the -n is suffixed is feminine and feminine nouns in Hausa normally take the anaphoric -r and not the -n :

(1) The anaphoric -n/-r is generally used with both nouns and sentential NP's e.g:

yaaro-n "the boy"

ceewaa Audu yaa koomo-n "the fact that Audu
has returned"

din is mainly used with sentential NP's and with foreign words or native words with unusual phonological forms e.g.:

ceewaa Audu yaa koomoo din.

pensur din - "the pencil"

29. céewáá saraakunàa sún dáina shari'á-n báa kyáu
 that the kings have stopped administering justice
 is not good

Here, the anaphoric -n is used instead of the -r which goes with feminine nouns. Therefore it must be qualifying the whole complement sentence and not the feminine noun shari'aa alone.

Further, the anaphoric particles are suffixed to nominals only. They do not qualify verbs as such but in 30 below we find din/-n suffixed apparently to a verb:

30. céewáá sóójà sún zóo-n/dín 'ái báa 'abín murnaa bá nēē
 that the soldiers have arrived is not good news.

The -n/din, although actually suffixed to a verb here, is in reality qualifying the whole of the embedded sentence which is a rewrite of an NP.

Ceewaa-complements can be linked to a preceding NP by the genitive link e.g.

31. laabaari-n (céewáá) saraakunàa sún dáina
 shari'a yaa zóo mana

the news that the kings have stopped administering
 justice has come to us.

The complement sentence is embedded directly into the matrix sentence by PS rule. The complementizer ceewaa is later introduced transformationally (cf P. 31). When the complementizer is introduced the relationship between it and the embedded sentence is either appositional or genitival⁽¹⁾ appositional occurrence:

34. sù nàa 'iimaanii dà ceewaa duk bakii báayán
yaa mútù zái sáake taashii à wani wurii cikin
Kásar Habasha
they believe that every blackman will rise
after death in a certain place in Ethiopia.

genitival occurrence:-

35. 'an baa dà rahootoo ceewa-r soojoojin 'yan
mulkin mallakaa na Amirka sun shiga Kambodiya
it was reported that the imperialist
American troops have entered Cambodia.

Similarly, when the main verb of the matrix sentence is a phrasal verb" which is in reality the verb yi "to do"

(1) The genitival occurrence is very rare with most of the Hausa speakers I have come into contact with here in London. I, moreover, do not use the genitive in this way in my idiolect at all.

followed by a dynamic-noun object; or when the ceewa complement occurs as a second NP modifying another preceding NP in constructions of the form V NP₁ NP₂,

where NP₂ dominates a sentence which is preceded by ceewaa, the relationship between the complementizer and the dynamic noun is either appositional or genitival: appositional relationship between the dynamic noun and the complementizer:-

36. naa yi tsammaanii (ceewaa) ya naa zuwaa
 I do thinking that he is come
 I thought he was coming.

genitival relationship with dynamic noun:

37. naa yi tsammaani-n(ceewaaa)ya naa zuwaa
 I thought he was coming

appositional with first NP:

38. 'an saami laabaarii ceewaa soojan Amirka
 one get news soldiers
 sun shiga Kambodiya
 they enter Cambodia

genitival relationship with first NP:

39. 'an saami laabaari-n ceewaa soojan

Amirka sun shiga Kambodiya
 and

Sentences 38 and 39 are synonymous/can contain the same lexical items (except the -n which is not present in 39)

They must therefore have the same deep structure: sentence 39 is derived from 38 by genitive link deletion:

T-Genitive Link Deletion

$$\begin{array}{ccccccc} \text{SD} & \text{X} & \text{N} & \text{GL} & (\text{S}) & \text{NP} & \text{Y} \\ & 1 & 2 & 3 & 4 & 5 & \end{array}$$
 SC: 1, 2, \emptyset , 4, 5.

condition: N must have the feature plus dynamic. This condition will cover the restriction for both the phrasal verb and also a noun modified by a ceewaa complement.

The Complementizer "ceewaa" (1)

Ceewaa is the only complementizer in Hausa which has overt morphological shape.

The Hausa equivalents of the wh- complementizers of English are nouns of place, manner, time etc., modified by relative clauses. For example the Hausa for the following English sentences ~~was~~:

-
- (1) The grammatical status of ceewaa is not very clear. It has an etymological relation with the verb cee "to say"; in fact it has the same phonological form as the verbal noun of the verb but their syntactic functions are different. Although we do not get ceewaa ceewaa, ~~but~~ we get ceewaa following immediately after the verbal nouns of verbs which have the same meaning as cee:

ya naa fadaa ceewaa S
 he is say that

40. Tell me when he came
 41. I know where he went
 42. I know what you know
 43. I understand how it is done

are:

43. gàyáá mi ní lóókàcín dà yá zóó
 tell to me time which he come
 44. náá sán wurí-n dà yá tàfí
 place go
 45. náá sán 'àbí-n dà ká sánii
 thing you
 46. náá gaánèè yàd dà 'á kèè yín sà
 see how one is do it

It is evident that 'abi-n "the thing", lookaci-n "the time" and wuri-n "the place" are just ordinary nouns followed by the referential -n. That complex words such as yadda/yanda "the way (how)" and 'inda "the place where", are also compound words consisting of three grammatically distinct morphemes can also be proved in the following way:

The three constituent morphemes of each of these ~~wxx~~ words are (1) a noun (2) a referential particle and (3) a relativizer as shown in the following paradigm:

<u>Noun</u>	<u>Referential Particle</u>	<u>Relativizer</u>
yaaya	-n	da
'inaa	-n	da
yaaya - n - dà --> yaayan dà --> yanda --> yadda "how"		

The derivation **is** like this: First, one of the two ya's is dropped⁽¹⁾ leaving yan da and then the -n is assimilated to the following d giving yad da. The same process can be assumed for 'inda (i.e. 'inaá - ñ - dà → 'indà)⁽²⁾ only that here the -n is not assimilated to the following da (cf foot note P).

Now, if we compare these two complex words (yadda, 'inda) with other ordinary nouns such as raanaa "day", wani "a certain one" which behave almost exactly in the same way when modified by a relative clause we see the following pattern:

raánaá - r - dà → raána-r dà → rán dà

the day which

wáni - ñ - dà → wáni-ñ dà → wán dà
"a certain male wh-"

watá - r - dà → watá-r dà → war dà → wadda

"certain female wh--"

(1) When the first yaa is dropped the tone pattern of the complex word becomes high low yan da; but when the second is dropped leaving the yaa followed by the -n the falling pattern is high-low-low yaanda. Both forms are commonly used in most dialects.

(2) 'inda may be a direct borrowing from Arabic of the Arabic preposition 'inda "where".

Another reason for disallowing these nouns as complementizers is that they are always followed by a relative clause and never by a general clause while the reverse is the case with ceewaa. Such ^aconstruction in Hausa is generated by the base rule:

$$\text{NP} \rightarrow \text{(N (Ref) } \overset{(2)}{\text{S}} \text{)}$$

while in English and Russian they are generated by the rule which rewrites an NP just as an S⁽¹⁾.

The presence of the complementizer is obligatory when the complement sentence is in initial position and is not modified by a relative clause e.g.

47. ceewaa Audu yaa daawoo gaskiyaa nee
 he return true is
 that Audu has returned is true.

but not *Audu yaa daawoo gaskiyaa ne.

But when the complement is in the initial position and is modified by a relative clause the presence of the complementizer is optional:

(1) Lees' Grammar of English Nominalization (P.59);

Comrie's Nominalizations in Russian, Dissertation for the Diploma in Linguistics, University of Cambridge,

May, 1969. (2) cf foot note (1) on page 113

- 48.(ceewaa) Audu yaa daawoo din da ka ji gaskiyaa nee
hear
that Audu has returned as you have heard is true.

The presence of the complementizer is obligatory also when the complement sentence is preceded by a preposition i.e when the sentence rewritten as an S is immediately dominated by a PP. e.g.

49. naa tabbataa da ceewaa Audu yaa daawoo gaskiyaa nee
believe with
I believe that it is true that Audu has returned

but 50 is ungrammatical:

- 50.*naa tabbataa dà Audù yaa daawoo gaskiyaa nee

However, the preposition can be deleted optionally and when it is the complementizer may also be deleted together with it. e.g.

51. nāa tabbataa (ceewaa) Aūdū yaa daawoo gaskiyaa nee
I believe that it is true that Aūdū has returned.

The complementizer is normally deleted when it is immediately followed by emphatic or doubt particles e.g.

52. yaa kamaata mu ga (eewaa) lallai haka diin ba ta
 it behove we see emph this not-it
 faaru ba
 happen

we must see for certain that this does not happen

53. yaa gayaa wa 'yan-jariiduu (ceewaa) wai jiharsa
say to reporters (doubt) his region
baa taa saamun taimakoo 'isasshee
it get aide enough
he told reporters that his region was not getting
enough aide.

The presence of such particles makes the deletion of the complementizer almost (but not quite) obligatory and as a result of this the particles themselves appear to be the complementizers. But this is not true because the particles can be shifted to ^avarious places inside the sentence where the complementizer cannot be shifted. For example 54 (a) --(d) are all grammatical:

- 54.(a) yaa kamaata mu ga laɪlaɪ haka din ba ta faru ba
 (b) yaa kamaata mu ga haka din laɪlaɪ ba ta faru ba
 (c) yaa kamaata mu ga haka din ba ta faru ba lallai
 (d) yaa kamaata lallai mu ga haka din ba ta faru ba

all meaning the same (cf example 52). But this is impossible with ceewaa. Thus the following are all ungrammatical:

55. (a)*yaa kamaata mu ga haka din ceewaa ba ta faru ba
 (b)*yaa kamaata mu ga haka din ba ta faru ba ceewaa
 (c)*yaa kamaata ceewaa mu ga haka din ba ta faru ba

This is because the complementizer has one position only in relation to the embedded sentence viz it always immediately precedes the complement sentence and whenever the sentence is moved (by extraposition) it takes the complementizer with it.

Transformations required to produce the surface structures of sentences containing NP complements and sentential subjects:-

1. T-COMPLEMENTISER³ PLACEMENT

SD: X (S)_{NP} Y
1 2 3 SC: 1 ceewaa 2,3

This rule will introduce ceewaa before NP complements and sentential subjects (cf examples 32, 33, 34).

2. T- EXTRAPOSITION

SD: X (S)_{NP} Predicate Y
 1 2 3 4 SC: 1, ∅ 3, 2, 4 .

Sentences 56 (a) - (b) are synonymous:

56. (a) cceewaa Audu zai tafi Kano mai yiwuwaa nee
that Audu will go to Kano is possible

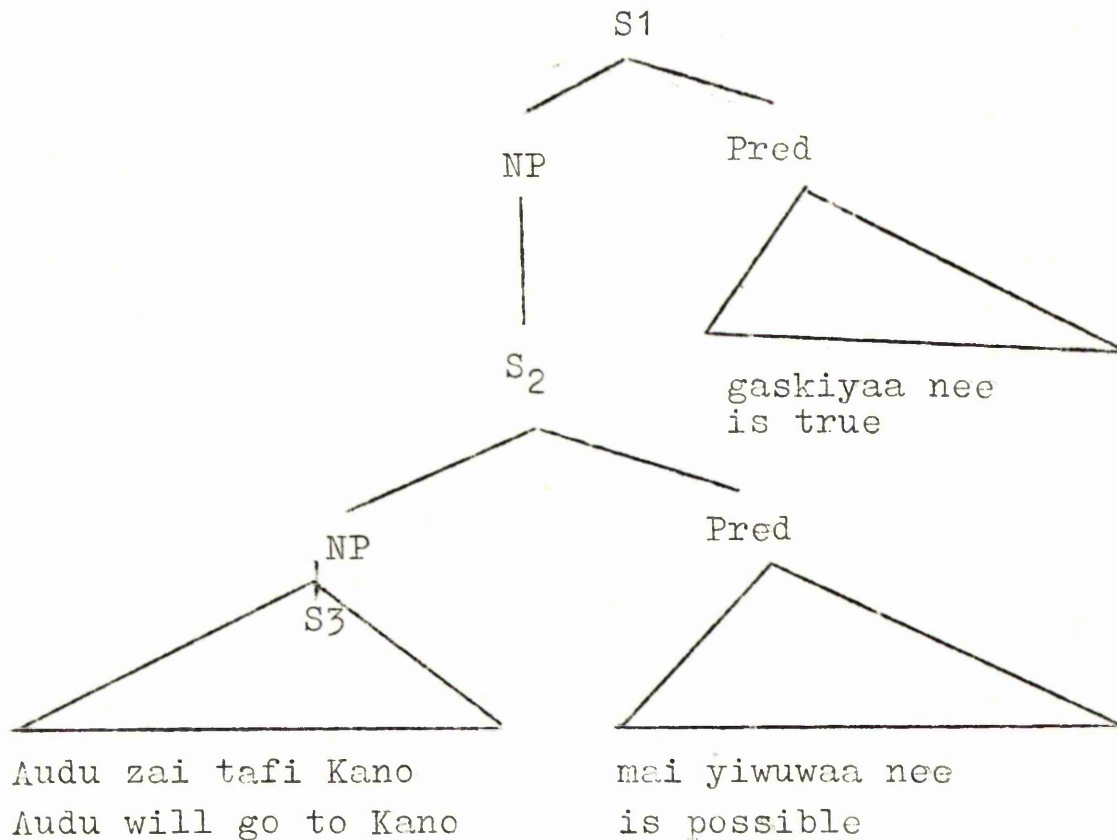
(b) mai yi wuwaa ne (ceewaa) Audu zai tafi Kano.

(b) is derived from (a) through the application of T-Extraposition which shifts sentential subjects to the right of predicates.

This transformation must be cyclic:

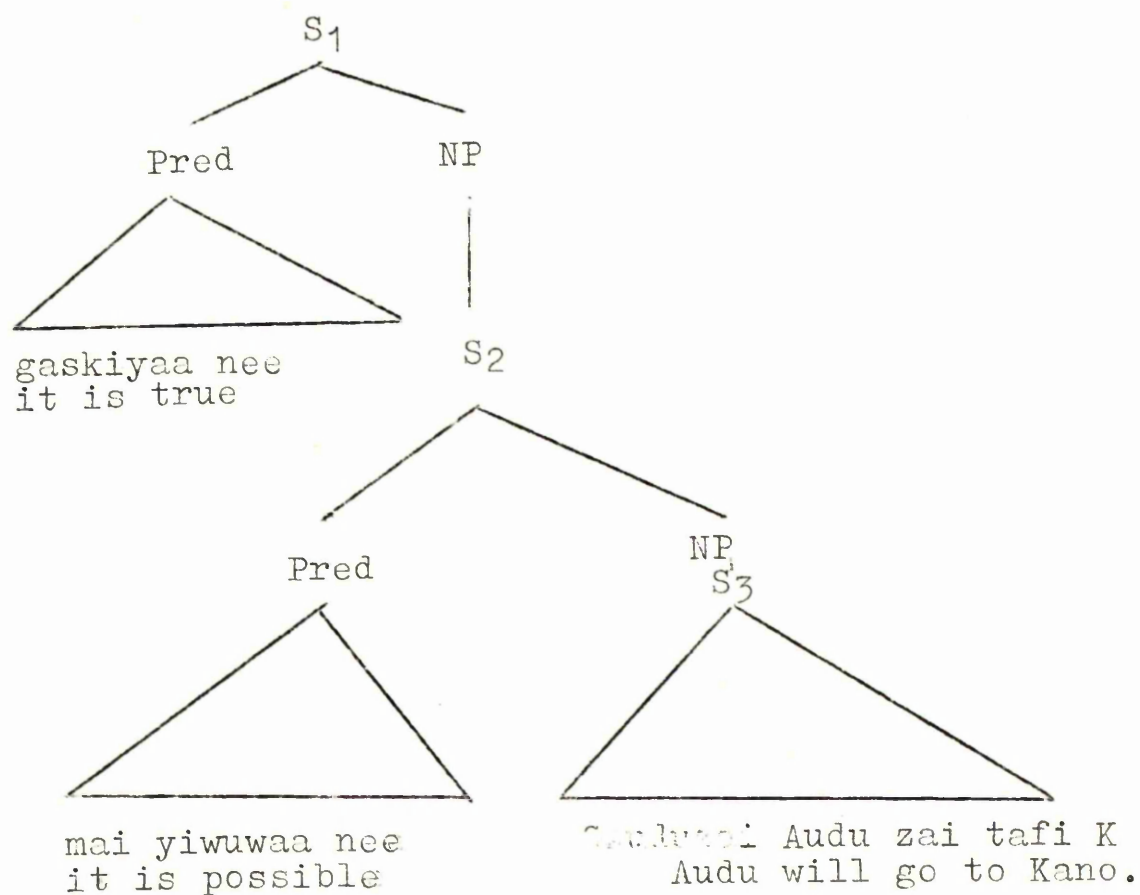
57. gaskiyaa nee mai-yiwuwa nee Audu zai tafi Kano
possible will
it is true that it is possible that A will go to Kano

58 will have the following simplified deep structure:



There is no relevant rule applied in the S_3 cycle.

T-Extrapolation must operate first on S_2 which will shift S_3 to the right of the predicate of S_2 whose derived structure will then be mai yiwuwaa nee Audu zai tafi Kano "it is possible that Audu will go to Kano". Secondly the whole of S_2 is then extraposed to the right of the predicate of S_1 whose derived structure after the application of the transformation will be:



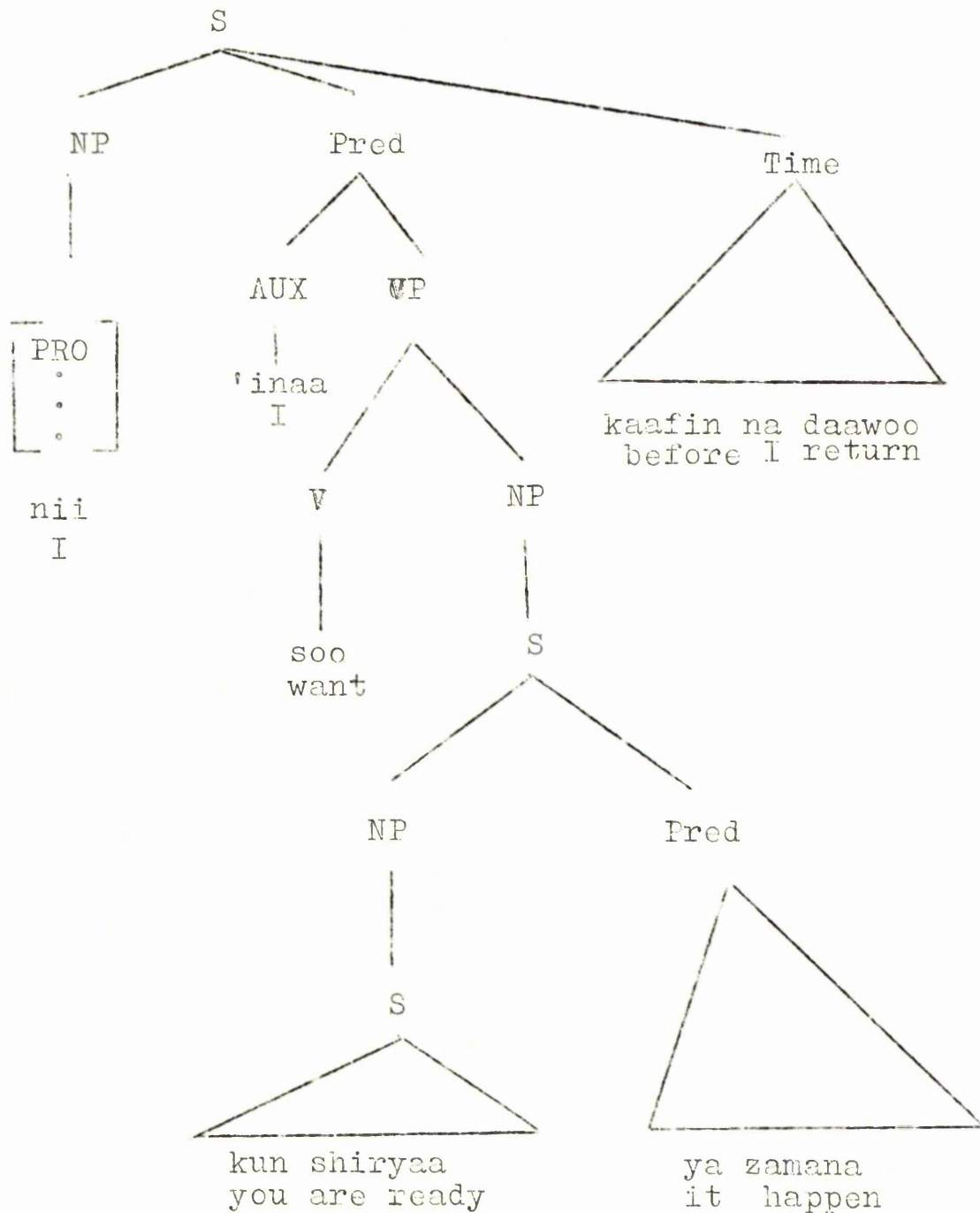
This transformation is obligatory with certain verbs
e.g. zamana "to happen", kyautu "to be good/better",
yiwu "to be possible" etc., etc., eg.

58. 'inaa so(n) ya zamana kun shiryaa kaafin na daawoo
happen you ready before I
I want you to be ready before I return.

but not:

59. *'inaa so(n) kun shiryaa ya zamana kafin na daawoo

The simplified deep structure for 58 can be character-
characterized by the following tree diagram:



With most verbs, however, both the extraposed and the non-extraposed versions are acceptable though the former is always far more acceptable. For example 60 and 61 are both acceptable but 61 is generally more acceptable than 60:


60. ceewaa Audu zai tafi Kano gaskiyaa nee
that Audu is going to Kano is true

61. gaskiyaa nee ceewaa Audu zai tafi Kano
it is true that Audu is going to Kano.

3. T- Prep Deletion

SD:	X	da	(ceewaa S)	NP	V
	1	2	3		4
SC:	1	∅	3		4

The preposition da "with" in V-prep (i.e verbs which are normally followed by the preposition da) can be deleted optionally:

62. (a) naa tabbataa da ceewaa Audu zai tafi Kano 
- (b) naa tabbataa (ceewaa) Audu zai tafi Kano
I believe that Audu is going to Kano.

4. T- Comp Deletion

SD:	X	(V	ceewaa	(S)	NP	Pred
	1	2	3	4	→ SC:1	, 2, ∅ 4.

Condition: 2 must be immediately dominated by a predicate phrase. This condition is necessary in order to prevent the deletion of the complementizer in sentential subjects and other initial positions.

It seems that the complementizer also cannot be deleted with certain ~~certain~~ (dynamic nouns) which are modified by ceewaa-complement e.g. maamaakii "surprise" or "wonder", hushii "anger" etc., etc. Thus (b) in 64-66 are ungrammatical:

63. (a) naa yi maamaakin ceewaa yaa tafi
do surprise
(b) *naa yi maamaakin yaa tafi.
I am surprised that he has gone

64. (a) naa ji haushin ceewaa yaa tafi
feel anger
(b) *naa ji haushin yaa tafi.
I am angry that he has gone.

There are other cases where the opposite is true (i.e. where the complementizer is obligatorily deleted) with some individual verbs e.g.

65. (a) naa daukaa goobe zai tafi
assume tomorrow
(b) *naa daukaa ceewaa goobe zai tafi.
I thought he was going tomorrow.

66. (a) naa zataa shii dooloo nee
think he fool
I thought he was a fool
(b) *naa zataa ceewaa shii dooloo nee. (1)

(1) some speakers may accept (b) 63-66 as perfectly normal Hausa sentences but none will however, deny that (a) is more natural than (b) in all the examples.

The exceptional behaviour of such verbs (and nouns) will be treated by the lexical selection features of the verbs. For example the noun hush.ii will be entered in the lexicon as:

3	N
+	Comp
-	Comp Del

and the verb zataa will be entered as:

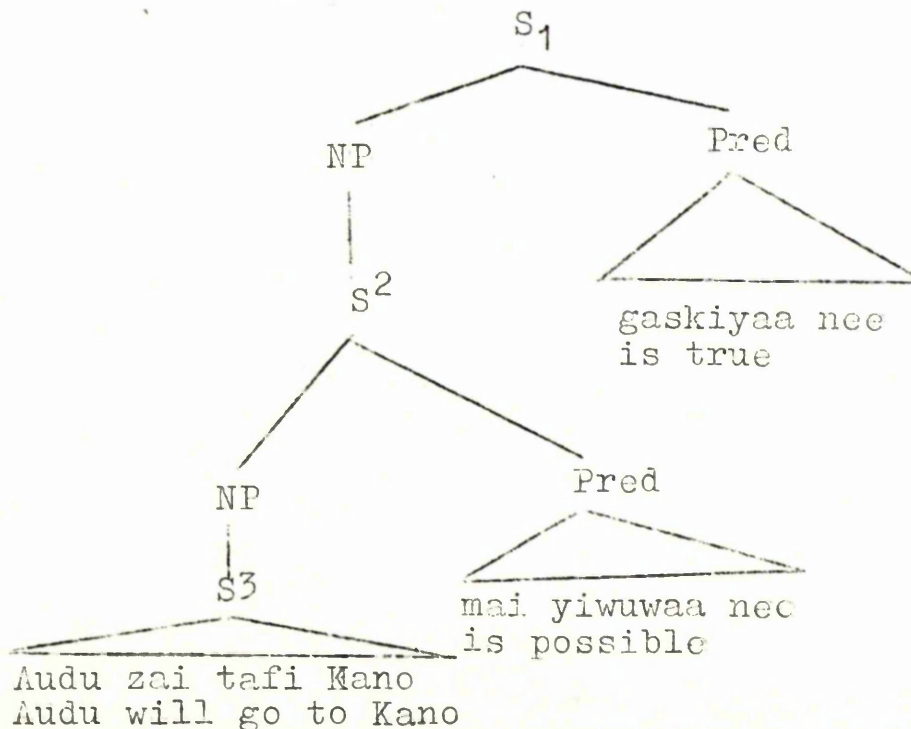
+	V
+	Comp
+	Comp Del

The operation of T_1 .. T_4 can be exemplified by the following simplified tree diagrams:

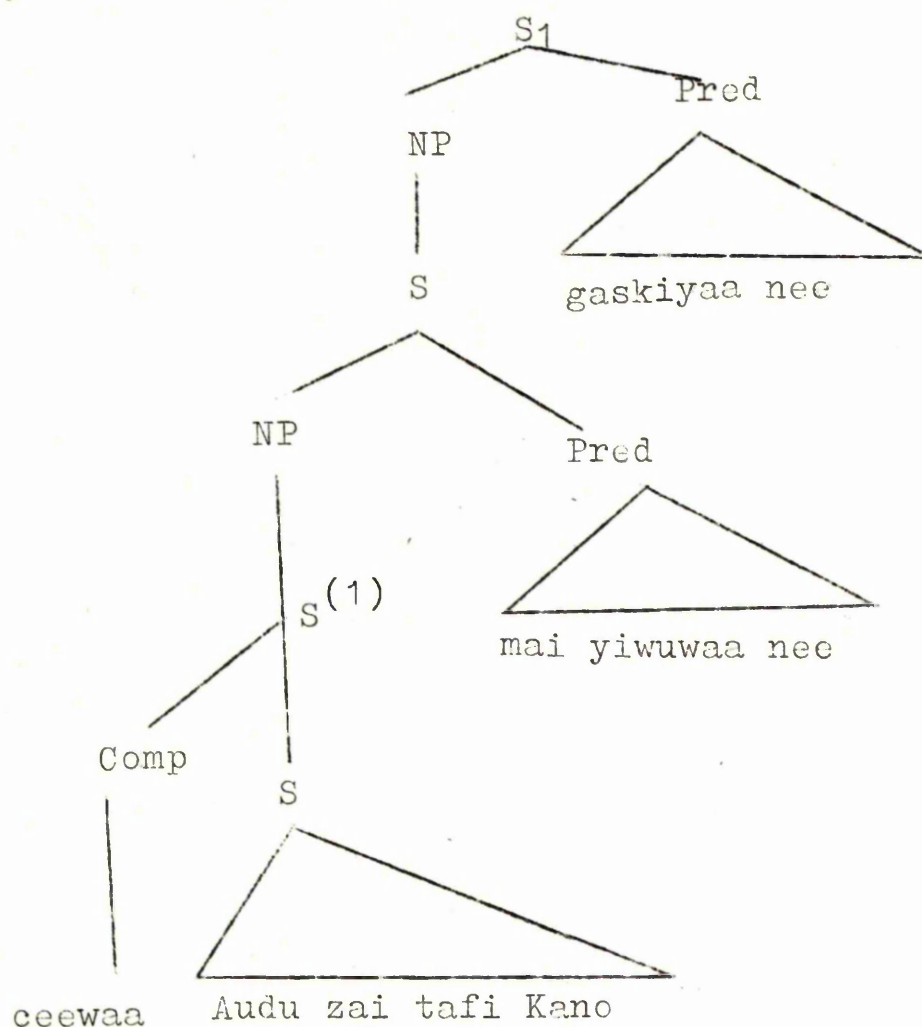
T- Comp Place

gaskiyaa nee mai yiwuwaa ne Audu zai tafi K

simplified SD:



Derived structure after Comp. Placement:

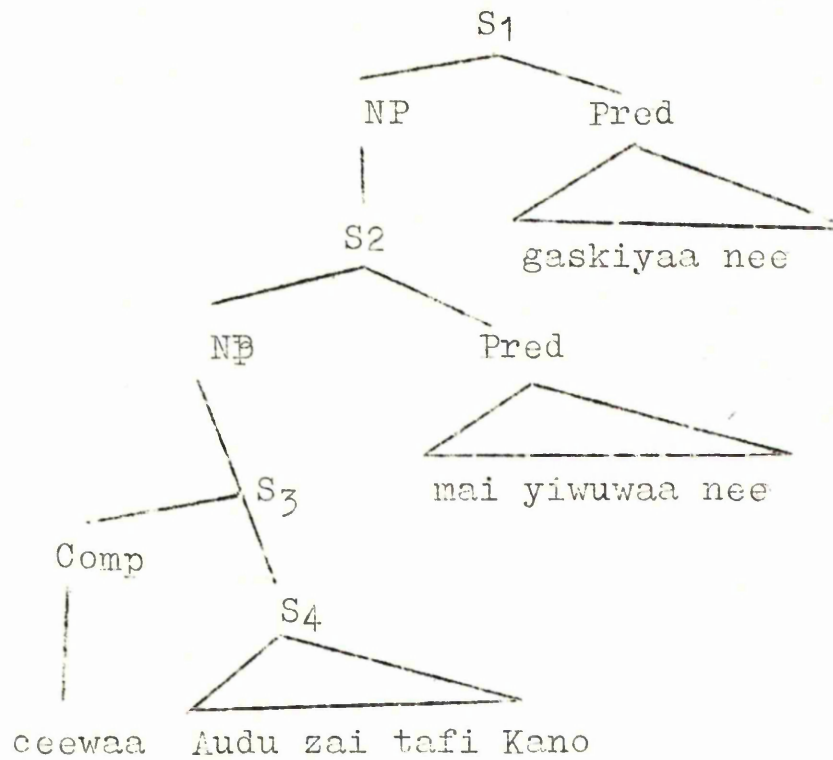


The complementizer must be 'Chomsky-adjoined' to the complement sentence so that the complement sentence can carry the complementizer with it⁽¹⁾ whenever it is shifted by extraposition. If the complementizer were to be 'sister-adjoined' to the sentence, then it would not take the complementizer with it when it is extraposed and this would result in generating ungrammatical sentences like

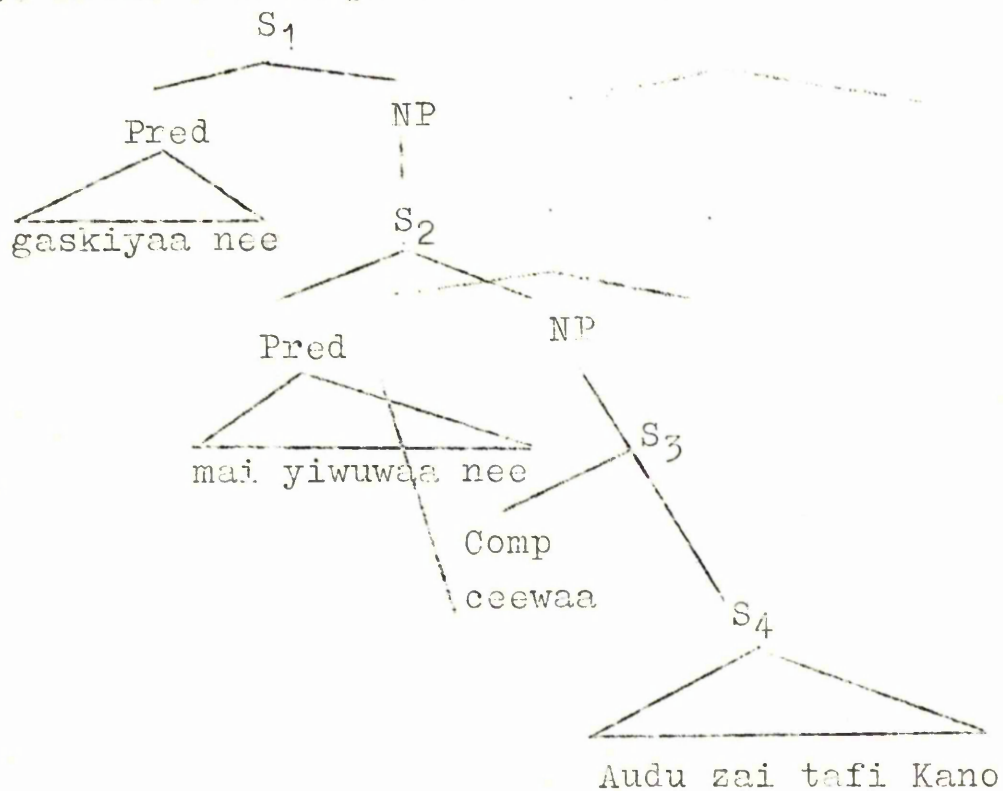
* 67. *ceewaa mai yiwuwaa nee Audu zai tafi Kano
&

(1) in accordance with Chomsky's A/A principle. cf Chomsky (1962 P.931, and 1964 P.); and Ross (1967) passim for a detailed critique of this concept.

SD:

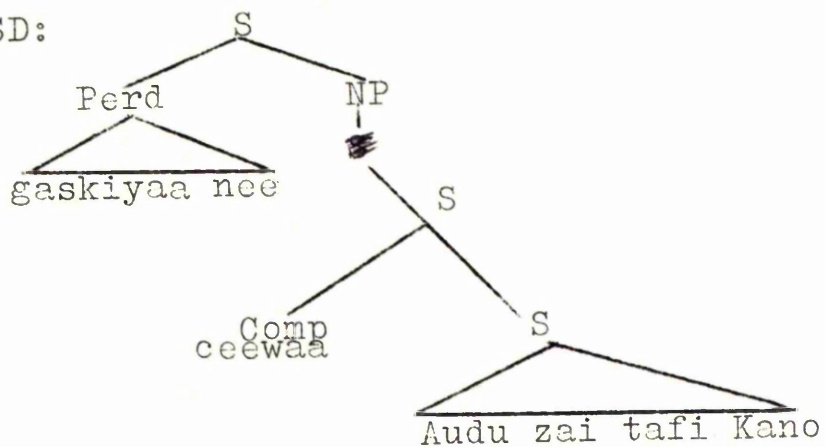


SC: after T-Extraposition has operated on S₂ and S₁ cycles:

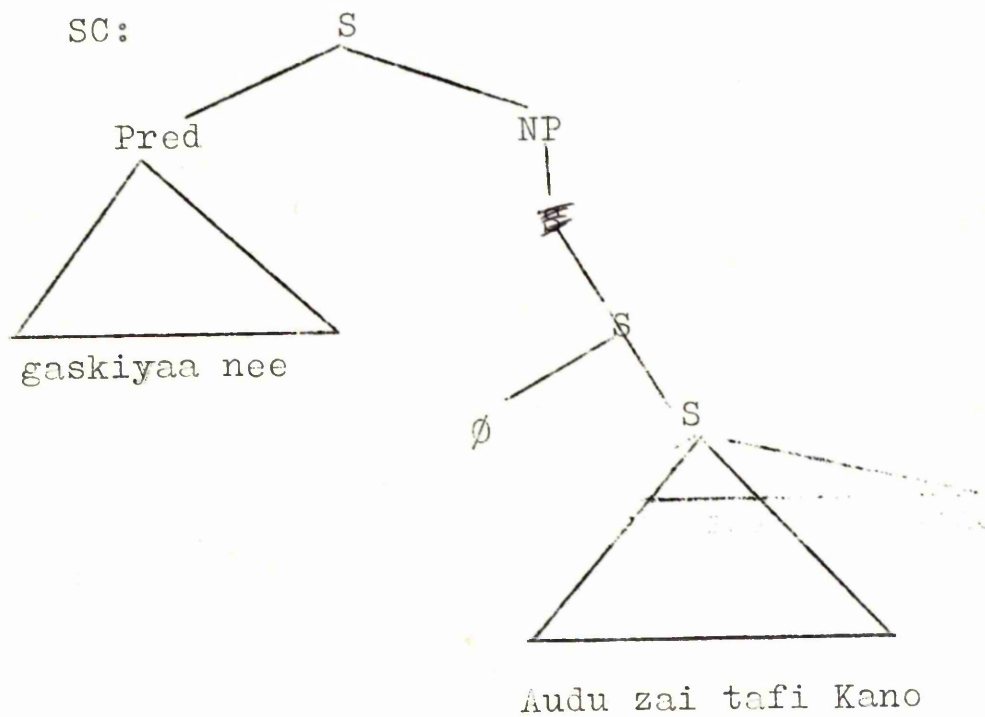


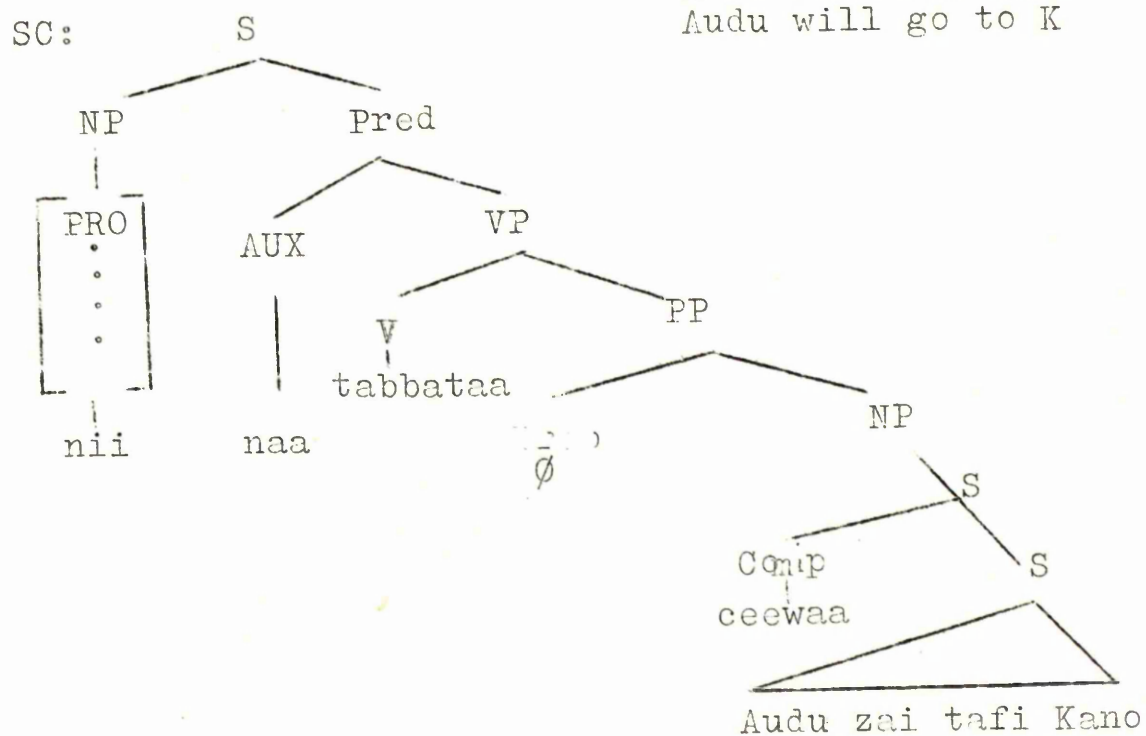
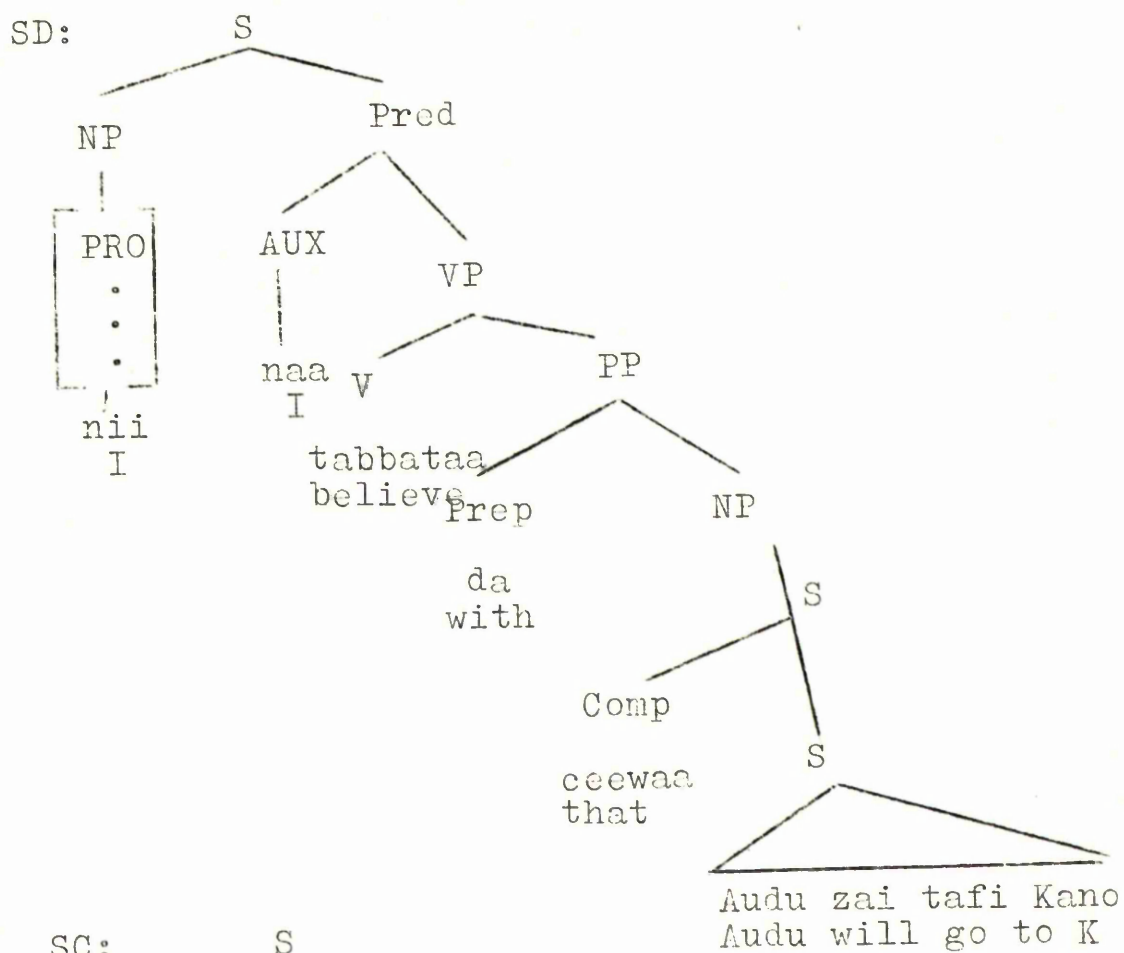
T-Comp Deletion

SD:



SC:





The Subjunctive Complement:

The internal structure of the subjunctive complement is the same as that of the ceewaa-complement. There are however, two differences between the two:

(1) while ceewaa-complement is restricted to the non-subjunctive tenses the subjunctive complement has always the same tense which is the subjunctive tense, hence its name the subjunctive complement.

(2) ceewaa-complements allow the introduction of the complementizer ceewaaa while in most cases the subjunctive do not.

Verbs which permit the introduction of ceewaa with the subjunctive complement are very few in number⁽¹⁾. e.g.

68. yáa gayáa mú sù (céewáa) sù dāukāa tamkar sūnā gidāa
 to them they feel like they home
 he told them to feel at home

69. yáa gārgādēē shi dā (céewáa) yā kulāa dā kannēnsā
 warn him look after brothers
 he warned him to look after his younger brothers

(1) There are clearly four possible classes of verbs defined in terms of their co-occurrence with either or both of the two complementizers (ceewaa and subjunctive). cf Appendix C for a partial listing of these four classes of verb.

The tests used to justify ceewaa-complements as NP's can also apply to subjunctive complements (cfP. 18 - 22) e.g. they can function as object of a one-object verb:

70. 'i naa so(n) n tafi "I want to go"

(cf 'i naa son kudii "I want money")

as second objects of a two-object verb:

71. naa rookee su su koomaa gidaa
beg

I begged them to return home

cf: (naa rookee su kudii - I begged them money)

The first object is the pronoun su "them" and the second the subjunctive clause su koomaa gidaa "they return home"

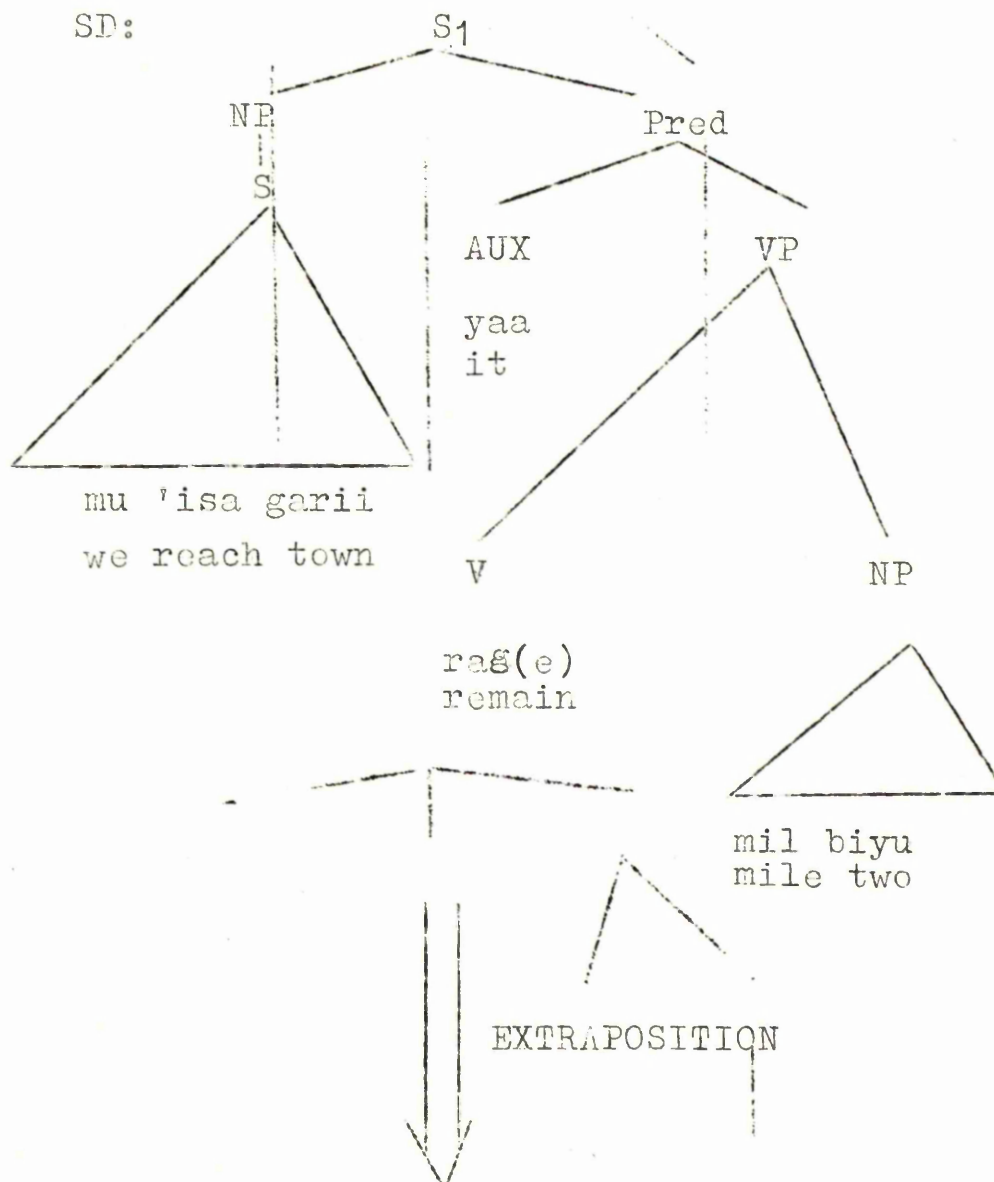
All the transformations that operate on ceewaa-complement can also operate on the subjunctive complement. But T-Extrapolation is always obligatory with subjunctive complements.

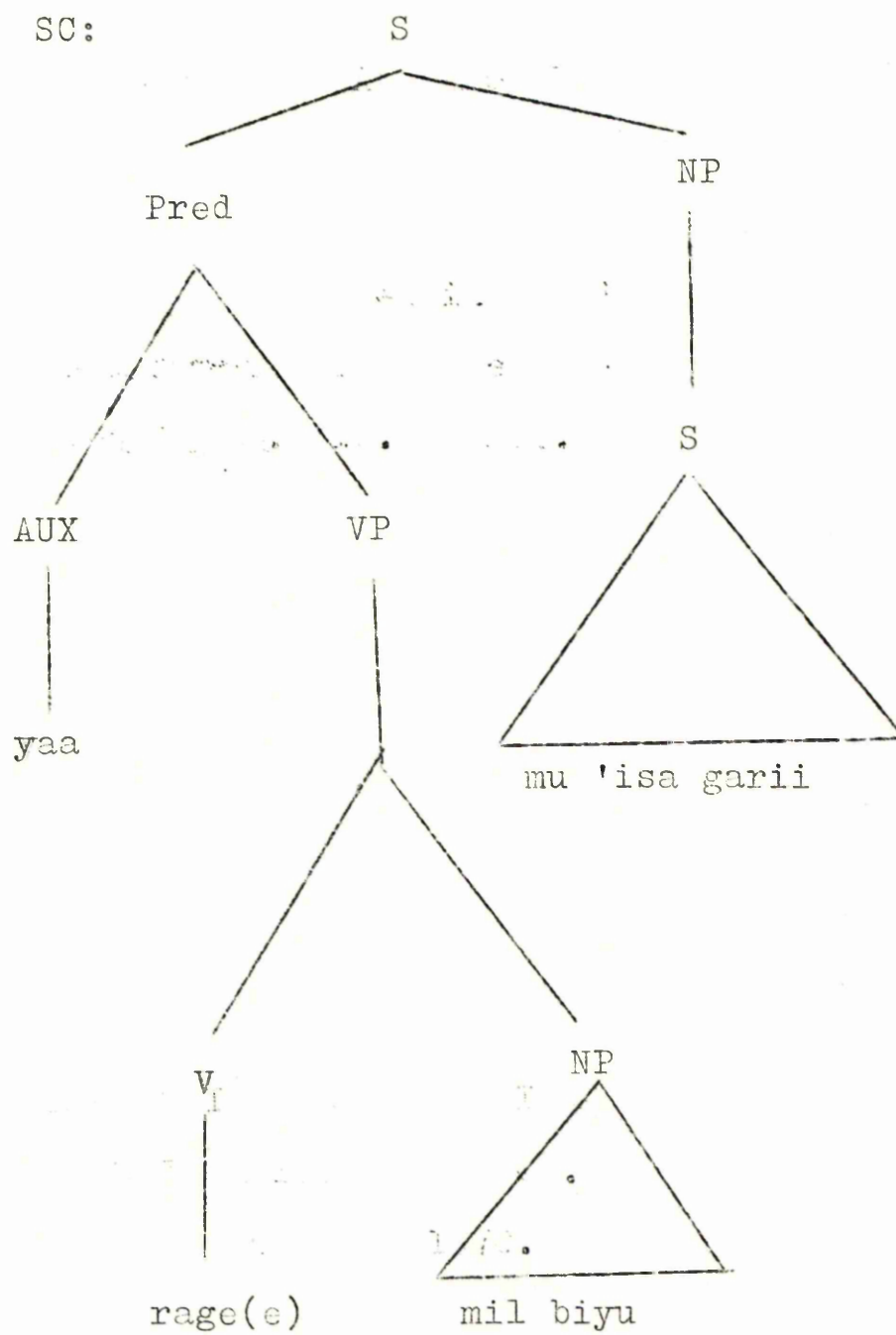
Parsons' analysis of the subjunctive is inadequate (cf his Exercises on Morphophonemic Verb Classes, Ex.19: Verbs ... taking Subjunctive clauses as objects). He analyzed the subjunctive clause "nu 'isa garii" "(wə) to reach the town" as the subject of the verb rage(e) "to leave/remains", in the sentence:

mu 'isa garii) is anyway, not an acceptable sentence of Hausa for me or for many native speakers I have checked with.

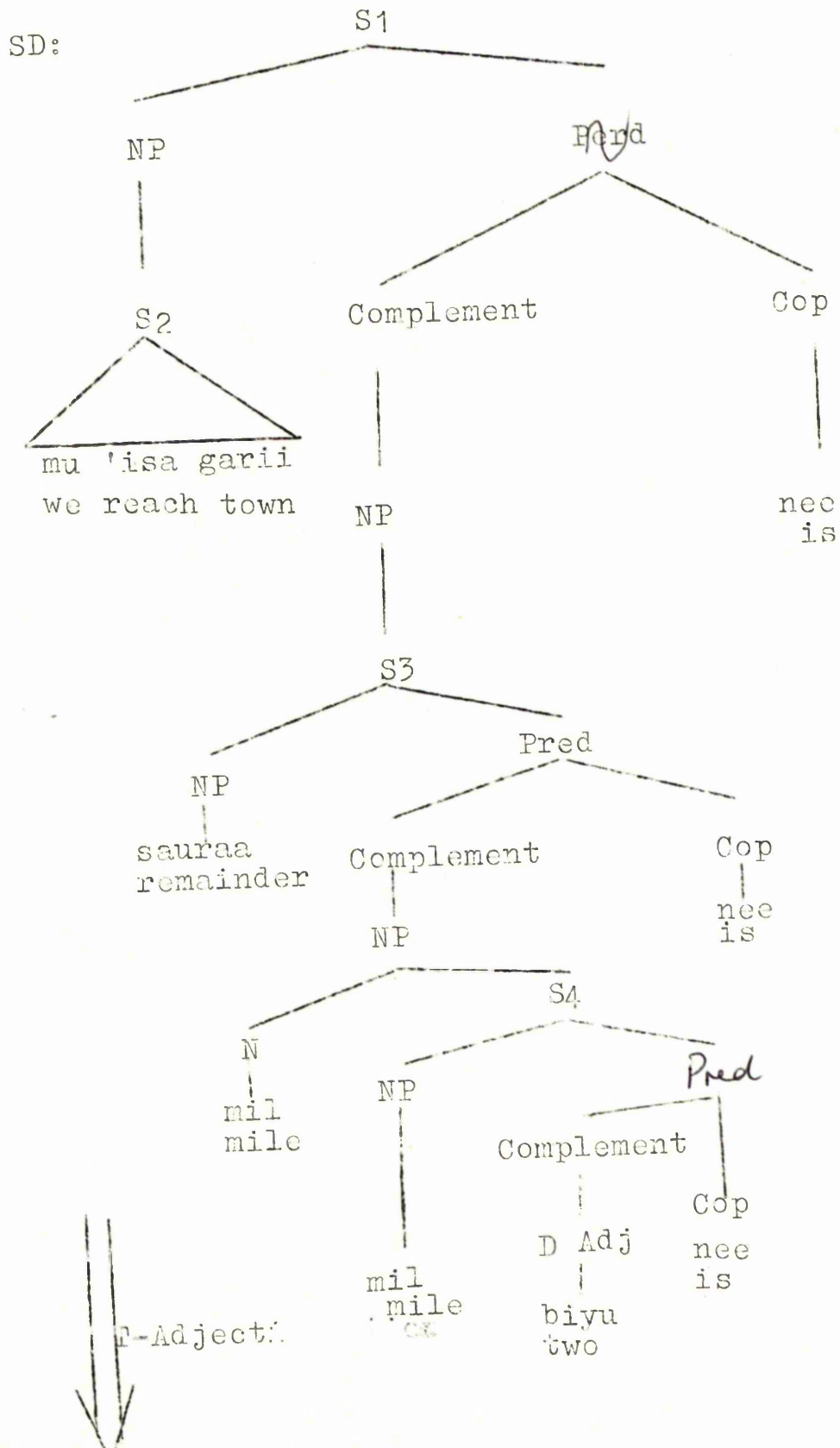
The correct structures of Parsons' examples are as exemplified in the following diagrams:

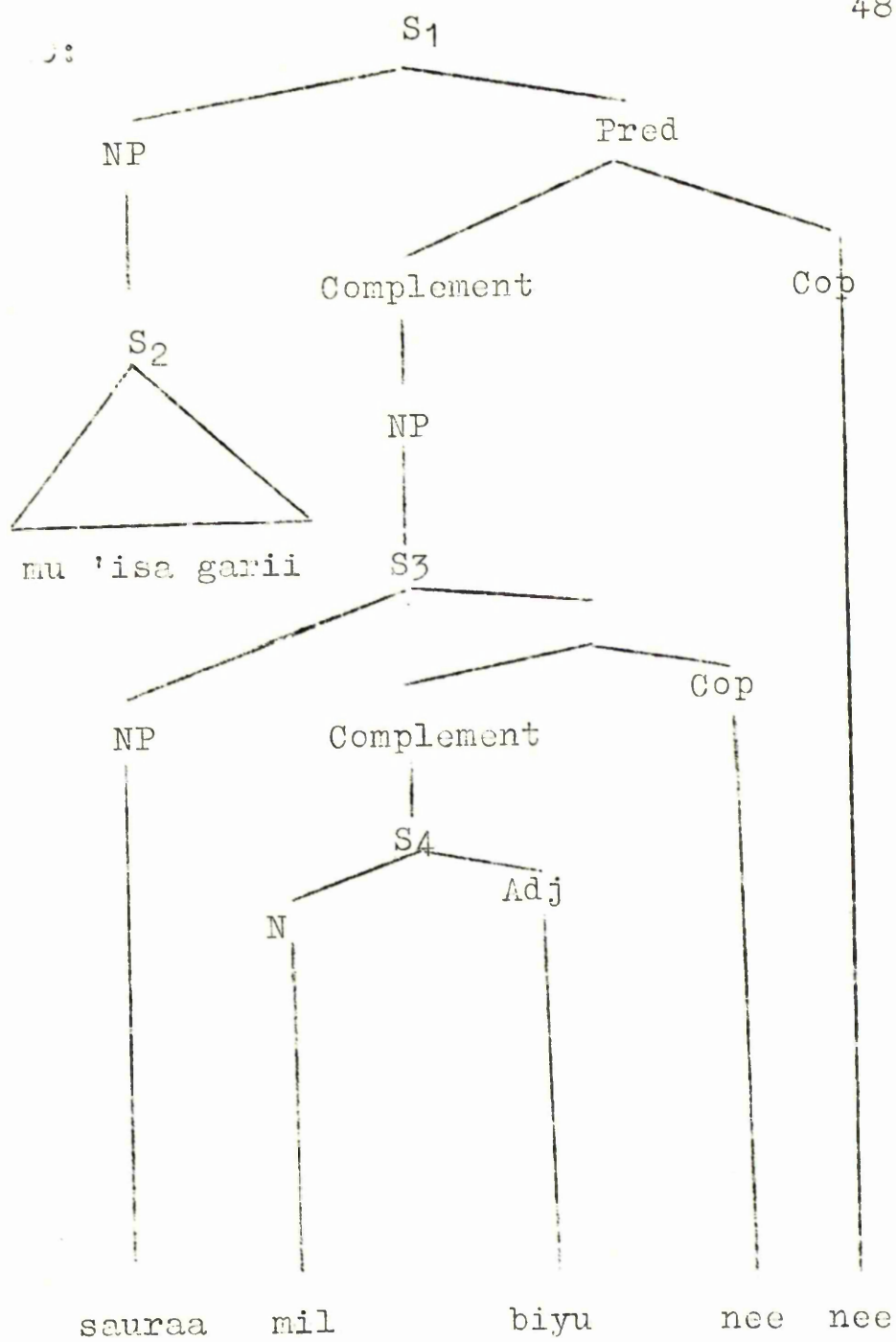
yaa rage(e) mil biyu mu 'isa garii.





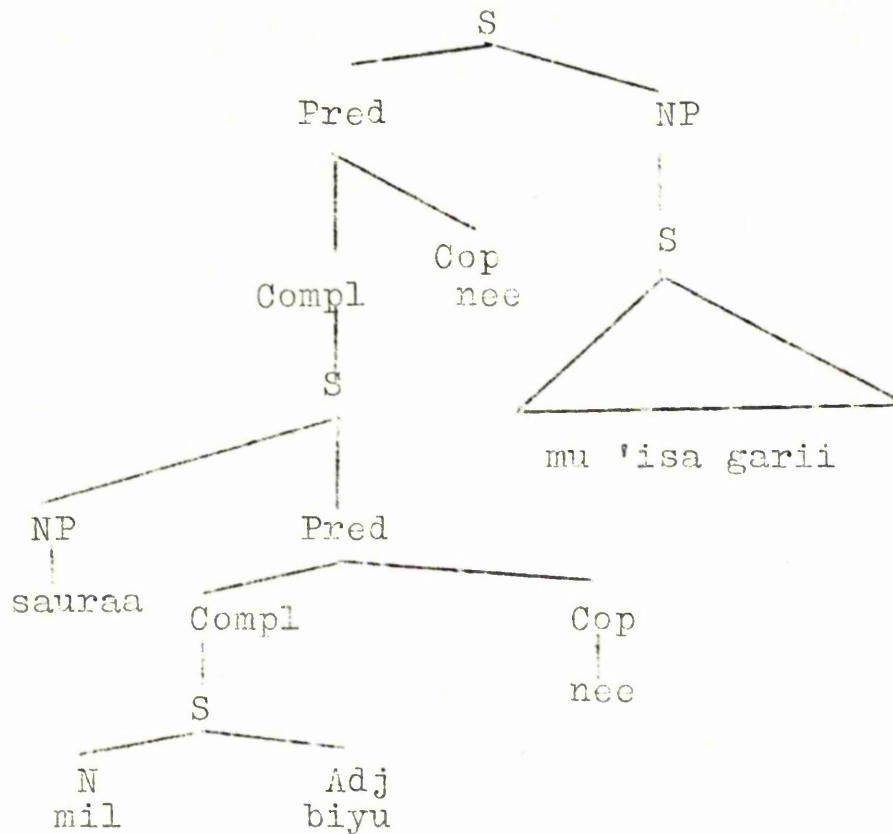
(sauraa mil biyu mu 'isa garii)





T-EXTRAPOSIT

SC:



one of the two copulas is deleted by equal identity deletion rule and the other is deleted by a later transformation viz copula deletion. After this we get the surface structure:

sauraa mil biyu mu 'isa garii.

CHAPTER 2

DERIVED NOMINAL AND GERUNDIVE NOMINAL

The main theoretical aim of this section of my thesis is to analyse the various aspects of nominalisation in Hausa other than the complement system, and see which of the two positions (Chomsky's lexicalist position or Lees' and later linguists' transformationalist position)⁽¹⁾ it supports.

The study of nominalization is still a virgin field in Hausa linguistics even within the framework of traditional linguistics. To the best of my knowledge nobody has done any large-scale treatment of this subject in Hausa at all.

For Hausa, I shall use the term "NOMINALISATION" in two distinct ways:

1. to refer to such phrases as:

75. karanta littaaɓin "reading the book"

76. daaɓwoɓar Audu "Audu's coming back"

77. karaatun jariidaa "newspaper-reading"

78. rubuutun wasiikaa "letter-writing"

(1) e.g. Lakoff, Ross and Chapin.

The main controversy over nominalisation (in English, hinges on the question whether the derived nominal is to be entered directly in the lexicon with its own idiosyncrasies or is to be derived transformationally from sentences containing the corresponding verb which alone would occur in the lexicon. Accordingly it is logical for me to begin my treatment of Hausa nominalization by investigating whether we have derived nominals in Hausa distinct from gerundive nominals. Therefore my first concern in this section will be to try to show that in Hausa there are two grammatically distinct types of verbal noun corresponding to the derived nominal and the gerundive nominal of English.

A great deal has been written on "verbal nouns" by various Hausa students. R.C. Abraham⁽¹⁾ for example, divides the verbal nouns in Hausa into two; (1) primary verbal nouns e.g. karantàawaa "reading" rubùutaawaa "writing" kashèewaa killing; and (2) secondary verbal nouns e.g. karàatuu "reading", rubùutuu "writing", kísàa "killing".

(1) The Language of the Hausa People; Government Printers, Kaduna (1959)

F.W.Parsons⁽¹⁾ also divides them into two - strong and weak. His weak verbal noun correspond to Abraham's primary and his strong to Abraham's secondary. C.T.Hodge⁽²⁾ however, considers only Abraham's secondary (Parsons' strong) as verbal nouns. Hodge considers the verbal noun of the unchanging verb (i.e Parsons' weak verbal noun) as a verb form which, according to him is to be treated in the syntax "as regards its nominal function"

In the traditional approaches to Hausa linguistics the nominals in the third column below are analyzed as strong or secondary verbal nouns of the corresponding verbs in the first column:

<u>VERB</u>	<u>GERUNDIVE NOMINAL</u> ⁽³⁾	<u>DERIVED NOMINAL</u>
kashe "to kill"	káshè(èwáá)	kísáá
kéera "to make"	kéera(àwáá)	kiiráá
karántà "to read"	kárántà(awáá)	karáatúu
rubùutà "to write"	rubùutà(awáá)	rubùutúu
gínà "build"	gínà(àwáá)	gínii
rínà "to dye"	rínà(àwáá)	rinii

(1) The Verbal System in Hausa. Afr. u. Ubersec, 44, 1, 1960

(2) An Outline of Hausa Grammar. Language Monograph, 41, 11

(3) I use these terms only as labels at this stage. The justification for their analysis as such will be given in the course of this chapter.

What has formerly led people to classify the derived nominal as equivalent to the gerundive is the fact that derived nominals are in some respects similar to the ~~geru~~ gerundives e.g they both have verbal root and can occur in progressive construction as in 87:

87.

(a) Aúdu yá nàà káshè mǎcǐijíí (1)
kill snake

(b) Aúdu yá nàà kísà-m mǎcǐijíí (1)
Audu is killing a snake

and in constructions such as 88:

88. (a) káshè mǎcǐijíí Aúdu yá kèe yíí

(b) kísà-m mǎcǐijíí Aúdu yá kèe yíí
killing the snake Audu was doing

and in nominalizations such as:

89. (a) káshè mǎcǐijíí-n Aúdu
Audu's killing the snake

(b) kísà-m mǎcǐijíí-n Aúdu
Audu's killing of the snake

(1) Here the form of the derived nominal (kísam) differs from its original form (kísaa) as shown in column 3 by virtue of the genitive -n which links it to its object (cf P125). The long final vowel characteristic of Hausa common nouns becomes short in the nomen regens before the genitive -n/-r, and the -n/-r is normally assimilated to the first consonant of the nomen rectum e.g.. sarkii "a king" -- sarki-n Masar -- sarki-m Masar "the king of Egypt"; sarauniyaa "a queen" -- sarauniya-r Kanoo -- sarauniya-k Kano -- "the queen of Kano"

There is however, an important semantic difference between the two types of nominal, viz those in construction (a) denote just a fact while the ones in (b) denote an action with the additional feature of either [+Occupation] or [+HABIT] or both. (1)

If we took the nominals in (b) to be gerundive like the ones in (a) we would then be assuming that constructions 90 and 91 could be transformationally derived from the same source:

90. *karàntà littàafi-n Audu*
Audu's reading/having read the book

91. *karaatun littàafi-n Audu*
Audu's reading of the book

which is not true. The source of 90 is the same as the structure which underlies 92 :

92. *Audu yaa karàntà littàafii*
Audu read a book

whereas 91 cannot be correctly derived from any underlying source at all. 91 is in fact a simple genitive construction

- (1) The nominals in (a) correspond to Lees' second nominal i.e his gerundive nominal (Lees 1960 P.54) and those in (b) correspond to his first nominal i.e the action nominal (Lees 1960 P.56) e.g.

(a) karanta littafin reading the book

(b) karaatu-n littafin the reading of the book

of the same structure as 93, 94, 95 (i.e a lexical noun modified by a genitive):

93. dóókí-n sárkíi "the king's horse"
 horse
94. rúwá-n tafkíi "water of the lake"
 lake
95. riigá-r Áudù "Audu's shirt"
 shirt

In support of this claim it can be observed that a number of transformations which operate on genitive constructions such as 93 - 95 can also operate on nominal constructions like 91. For example when the complement of a copula-sentence contains a genitive the copula nee/cee can come in between the head noun and the genitive (cf 96-98). In the same way adjectives qualifying the genitive-NP which normally come at the end of the whole NP (i.e head noun plus genitive), can also occur in between the head noun and the genitive for emphasis (cf examples 99, 100). All these transformations operate freely on the derived nominal and its genitive:

Examples:-

copula occurring in between the head noun and the genitive:

96. rúwá-n⁽¹⁾ tafkíi nées -->
 rúwáá nées ná tafkíi - "It is lake-water"

(1) when the head noun and the genitive are separated the genitive link (-n/r) assumes its full form and becomes na/ta.

The various constituents of a sentence (VP, object, adverbials) can be front shifted for emphasis (cf T-10P Appendix B P129) and this is true even when the sentence is nominalized.⁽¹⁾

Examples: VP front shifted:-

111. kàràntá littaáfii (née) Audu ya yi
reading the book was what Audu did

object. front-shifted:

112. littaáfii (née) Audu ya kée kàràntaawaa (cf f.n.1)
a book was/is what Audu was/is reading

time adverbial front-shifted:

113. jiyaa (née) Audu ya kàràntá littaáfin
it was yesterday that Audu read the book

(
(1) When the object of a gerundive nominal is front shifted or deleted and the verb is in the progressive tense the nominal takes the suffix -waa but the derived nominal never takes this suffix.

e.g object of gerundive nominal front shifted:

- 105 wasiikaa Audu ya kée rubuutaawaa
it is/was a letter that Audu is/was writing

gerundive nominal with deleted object:

106. rubuutaawa-r Audu
Audu's writing/having written

but not:

- *107. *wasiikaa Audu ya kée rubuutuwaa
108. *rubuutuwa-r Audu

neither can we have the gerundive nominal with its object front shifted or deleted without the -waa. Thus the following are ungrammatical:

109. *was~~i~~iikaa Audu ya kée rubuuta.
110. *rubuuta Audu (Audu's writing).

place adverbial front-shifted:

114. 'à ciki-n dàakii (née) A yá karantà littáfin.
 at inside room
 it was inside the room that Audu read the book.

Objects of sentences can be front-shifted as shown in example 112. However, we cannot have 115 or 116 i.e with the object of the derived nominal front-shifted:

115. *wasiikaa Audu yá kée rubuutuú
 116. *littaafii Audu yá kée karaatuú

The reason why 115 and 116 are ungrammatical is because of the fact that front-shifting is done only within the framework of a sentence and since the derived nominal is not a transformation of a sentence therefore its object cannot be front-shifted.

All these examples show clearly that the derived nominal plus its "semantic" object or subject has similar syntactic behaviour to the genitival NP in Hausa (for the derivation of which see Appendix B P.125). This means that the nominals karaatu "reading", rubuutu "writing" (and all derived nominals) are entered in the lexicon as are the simple nouns ruwaa water and dookii "horse".

It might be argued that karaatu-n Audu Audu's reading can have 117 as its source:

117. Audu yaa yi karaatuu
Audu (did (some) reading)

with yi-karaatuu analyzed as a verbal unit. Derived nominals do in fact have some syntactic behaviour in common with the so-called dynamic nouns⁽¹⁾ in Hausa. For example there is the possibility of inserting (a) an indirect object or (b) a particle such as har even, dai(emph) etc. between the verb yi "to do" and the derived nominal e.g.

118. Audu yaa yi dai karaatuu
Audu did (some) reading

119. Audu yaa yi ma Garba karaatuu
for
Audu did (some) reading for Garba

The derived nominal can also be qualified by an adjective.^(?)

120. Audu yaa yi kyakkyaaawan karaatuu
good
Audu did a good reading

It is true that there are compound forms in Hausa, but these are normally indivisible. For example no particles,

(1) cf Parsons: Abstract nouns...in Hausa; Afrikanistische Studien, ed Lukas, 1955, 373-404.

(2) The same also applies to dynamic nouns: the dynamic noun maganaa "speech/talking" could be substituted for karaatuu in the examples given.

adjectives or adverbs can occur in between the constituents of the following compound forms:

- 121. bàbbáa-dà-jakáa "a kind of bird"
- 122. bàbbá-dà-tsóólóó "untasty broth"
- 123. kàamáa-kàryáa "oppressive rule"
- 124. fàadí-kà-mùtù "china ware"
- 125. kàamá-kandá "a kind of sweet"

The elements of compound forms are inseparable; this is not true with yi plus its derived nominal as shown above.

The verbal noun yii plus the genitive link which connects it with its object in the progressive construction is normally deleted e.g.

- 126. Audu ya naa (yin) karaatuu
Audu is doing some reading

In the same way, the verbal noun can be deleted ~~when~~ the sentence is nominalized e.g.

- 127. a. ((Audu yaa yi karaatuu)_S)_{NP} --->
Audu did reading
- b. (yi-n karaatu-n Audu)_{NP} --->
- c. karaatu-n Audu "Audu's (doing the) reading"

When the verbal noun plus the genitive is deleted in constructions such as 127 (b) to produce (c) the reduced version has the same surface form as the derived nominal construction. This is why 127 (c) can be ambiguous: it can mean either (1) Audu's (manner) of reading which is analogous to ruwa-n tafkii "lake-water" i.e a simple genitival construction where a noun is modified by a genitive or (2) it can mean Audu's reading/having read which is a reduced form of yi-n karaatu-n Audu "Audu's doing/having done the reading".

This disambiguation is supported by certain syntactic facts. For example, the reduced transformational version can be followed by certain adverbials while the derived nominal version cannot be followed by any adverbial:

128. ((Audu yáá yi kàràatúú dà rááná)_S)_{NP} -->
Audu has read in the afternoon

129. yi-n kàràatún Audu dà rááná
Audu's having read in the afternoon.

but not:

130. * kàràatú-n Audu dà rááná

The point here is that the derived nominal does not admit adverbial extensions which are possible with the gerundive nominal because the gerundive nominal is a transformed sentence and the derived nominal is not.

Another syntactic difference between the two types of nominal is that the object of a gerundive nominal always follows it without a genitive link while a derived nominal is always linked to its object by a genitive link.

e.g. derived nominal with genitive link:

131. kaamu-n dookii horse-catching"

132. kiira-r fartanyaa hoe-making

gerundive nominal without genitive link:--

133. kaama dookii catching a horse

134. keera fartanyaa making a hoe

Our discussions above show explicitly that the syntactic behaviour of the derived nominal in Hausa is not at all the same as that of the gerundive nominal: the gerundive nominal behaves more or less in the same way as a sentence e.g it has a subject and an object and adverbs each of which can be front shifted just in the same way as each of these items can be front-shifted in a sentence; but the derived nominal is more like an ordinary noun (rather than a nominalized sentence) and as such it is better treated like an ordinary noun i.e to be put directly in the lexicon.

CHAPTER 3

THE GERUNDIVE NOMINAL

I shall now return to the gerundive nominal. In sentences which contain gerundive nominals such as:

135. bàn soó zaunaawar Audu minti 'uku 'à kan
kujeera-r maalam bá
 I did not like Audu's sitting for three minutes
 on the teacher's ^{chair} chair.

136. daawoowa-r Audu gidaa kullum dà tsaka-r daree
báa shí dà kyáu always at middle of night
 not it with good
 Audu's always returning home at midnight is not
 good

it is desirable to consider the gerundive nominal complex (i.e the verbal noun, subject, object(s) adverbials etc.) as an embedded sentence since deriving it from a head noun plus a great variety of optional categories (especially the various adverbials which are normally found in finite clauses) would be extremely complicated and redundant i.e repetitive⁽¹⁾

(1) cf Galadanci's The Simple Nominal Phrase in Hausa. Ph. D. London 1969 (Chapter 3, P 63-82).

In this section I shall consider the operations which re-order the various elements of the embedded sentence under nominalization. It is essential that we consider the whole sentence here and not the VP alone because by doing so we shall expose more clearly the syntactic differences between the two types of nominal under consideration (i.e the derived nominal and the gerundive nominal). I shall however, lay some emphasis on the VP with regard to its area of domination in order to see how the various adverbials are related to the VP within the nominalized sentence and to see whether this will bring to light any evidence for or against putting some of the adverbials within the VP.⁽¹⁾

Tense and Aspect in the Nominalized Sentence:

Tense and aspect are normally⁽²⁾ neutralized in the nominalized sentence.⁽³⁾ Thus the embedded sentences in examples 137 - 139 are all rewritten as zuwa-n Audu "Audu's coming" in 140 - 141:

(1) cf Chomsky (1965 P.102) who suggests that the VP contains, in addition to certain other elements, adverbs of manner but not temporal adverbs. Lakoff and Ross (1966) suggest that adverbs of manner are also outside the VP.

(2) cf Base rule No.12 (Appendix A P.107).

(3) cf Relational nominalisation (P.82) in which the gerund is modified by a relative clause.

Adverbials in the Nominalized Sentence:

Adverbs of Time, Manner, Place etc. can occur freely with the gerundive nominal together with the other elements of the VP (objects, adverbials of duration, frequency etc., etc.) e.g.

145. daawoowa-r Audu yanzu yaa baa ni maamaakii
Audu's having returned now has surprised me
146. karantaawa-r Audu da-karfii yaa firgita'a ni
with vigour frighten
Audu's reading loudly frightened me
147. zaunaawa-r Audu 'a kujeera-r maalam baa daidai ba ne
right
Audu's sitting on the teacher's chair is ill
mannered.

The various adverbials can co-occur and exchange places among themselves in the nominalized sentence exactly as in the base sentence without effecting any major change in the meaning or emphasis of the sentence. But their sphere of free exchanging is restricted to the end of the construction only i.e they cannot come before the major constituents of the sentence (viz the subject, the object and the nominalized verb). Thus examples 148, a - f all have the same meaning (with perhaps a slightly different focus of emphasis with some speakers):

Most native speakers will generally accept (a) - (f) as perfect Hausa. Perhaps some may assign different degrees of acceptability, but none will reject any of them as ungrammatical.

One exception to the generalization that adverbials function identically in simple and embedded sentences is that none of the adverbials can occur before the verbal noun in a nominalized sentence although some of them can precede the verb in a non-nominalized sentence (in fact only Time adverbial can be front-shifted but not other adverbials. Place, frequency^e and sometimes duration adverbials can also be front-shifted in poetic or figurative speech to give extra emphasis). Accordingly, (a) are grammatical while (b) are not in the following examples:

149. (a) jiya Áudù yáá kóomáa kánòò
yesterday Audu returned to Kano

(b) *jiya kóomáawa-r Áudù kánòò
yesterday Audu's returning to Kano

150. (a) 'a kánòò Áudù yáá yí shéekaráa 'ukù
at Kano Audu spent three years.

(b) *'a kánòò yí-n Áudù shéekaráa 'ukù
at Kano Audu's staying for three years

However, I shall assume here that in Hausa the natural place of all the adverbials i.e where they are generated by PS rules, is at the end of the sentence

after the VP proper and that when a sentence is nominalized all adverbials must remain in their natural place. The difference in grammaticality of 149 - 150 (a) and (b) is then naturally accounted for if we assume that nominalization is cyclic and that an adverb shift is last cyclic.

Manner adverbs in Hausa are realized by the preposition da "with" followed by an abstract noun e.g:

- dà kàrfii "vigorously (lit. with vigour)
 dà saurii "quickly" (" " quickness)
 dà saibii "sluggishly" (" " sluggishness)

When a sentence containing a manner adverb is nominalized the adverb can be retained as such :

151. (a) n nãa fáatã Audù zai dáawoo dà saurii
 I hope ~~that~~ Audu will return quickly
 (b) n nãa fáatã-r dáawoo-wa-r Audù dà saurii
 I hope of Audu's returning quickly.

Alternatively the adverb itself can be substantivized by deleting the preposition. When the adverb is substantivized it must precede the gerundive nominal and a genitive will join the two together:

152. (daawoowa-r Audu da saurii →)

sauri-n daawoowa-r Audu

Audu's quick return.

The Category (Neg) in the Nominalized Sentence:

The category (Neg) is realized under nominalization by the negational-noun rahhi "lack (of)" and not by the negative particle(s) ba -----(ba). The negational noun always precedes the gerundive nominal to which it is joined by the genitive -n:

153((Audu bai daawoo ba)_S)NP →

Audu has not returned.

154. rashi-n daawoowa-r Audu

Audu's having not returned

Emphatic elements such as har 'abadaa "never", har yanzu "not yet", koo kadaa "(not) at all" etc. which can occur with the category Neg in non-nominalized sentences are not retained at all in any form under nominalization (cf condition on T-Nom₁).

There are three types of nominalization rule which can operate on a sentence to turn it into an NP. I shall

label these transformations as:

- (1) T-Nom₁ (T-Nominalization One)
- (2) T-Nom₂ (T-Nominalization Two)
- (3) T-Rel.Nom (T-Relative Nominalization)

1. T-Nom₁:

This rule can operate on any type of sentence in Hausa regardless of whether it is transitive (with one or more objects) or intransitive. When this transformation operates on a sentence the gerundive nominal always comes first and the underlying NP subject always separates the gerundive nominal and its object(s). The subject is joined to the gerundive nominal by the genitive link but the object(s) always follow(s) the subject without the genitive link.

This transformation rule can be formalized in the following way:

T-Nom₁SD: X ((NP AUX V Y)S)NP Z
 1 2 3 4 5 6

SC: 1 ∅ ∅ [4] r 2 5 6
 (NOM)

Condition: 5 cannot contain Emph.

Examples:-

nominalization of sentences containing intransitive verbs followed by an adverbial:

155. (a) *Aúdù yaa zaúnáá 'à kàn kujeeráá* -->
Audu sat on a chair

(b) *záúnáawa-r Aúdù 'à kàn kujeeráá*
Audu's sitting on the chair.

nominalization of sentences containing single transitive verbs:

156. (b) *Aúdù yaa kéera fártányáá* -->
Audu has made a hoe

(b) *kéeraawa-r Aúdù fártányáá*
Audu's making the hoe.

nominalisation of sentences with prepositional objects:-

157. (a) *Aúdù yaa yárdá dà Garbà* -->
trust with
Audu trusts Garba

(a) *yárdá-r Aúdù dà Garbà*
Audu's trusting Garba

nominalization of double transitive sentences:

158. (a) *sarkii yaa náda Aúdù haakimii* -->
appoint lord
the king has made Audu a lord

(b) *nadaawa-r sarkii Aúdù haakimii*
the king's making Audu a lord.

159. (a) Audu yaa sayar dà dookii mà Garbà
sell

Audu sold a horse for Garba

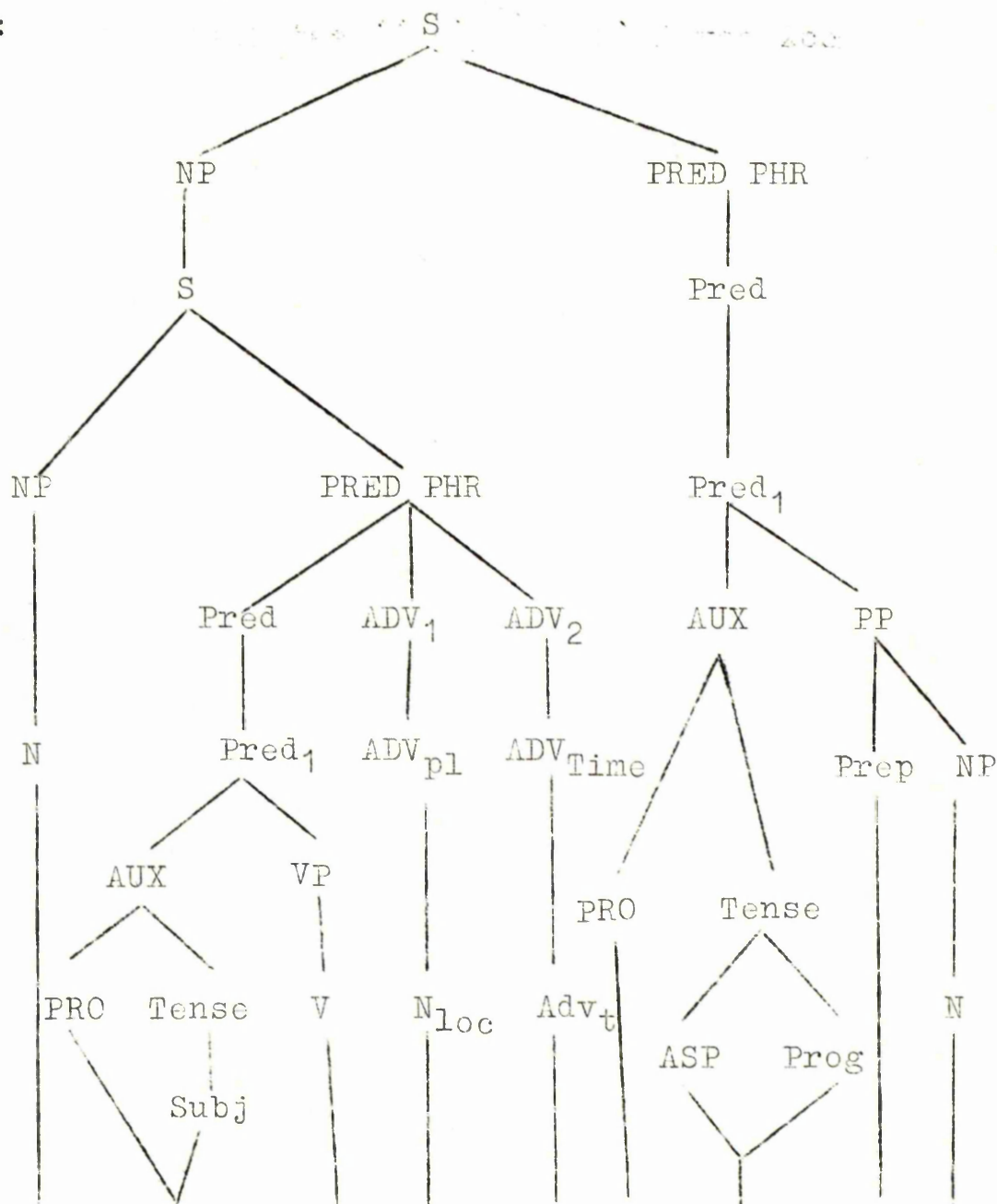
- (b) sayarwa-r Audu dookii na Garbā

Audu's selling the horse for Garba

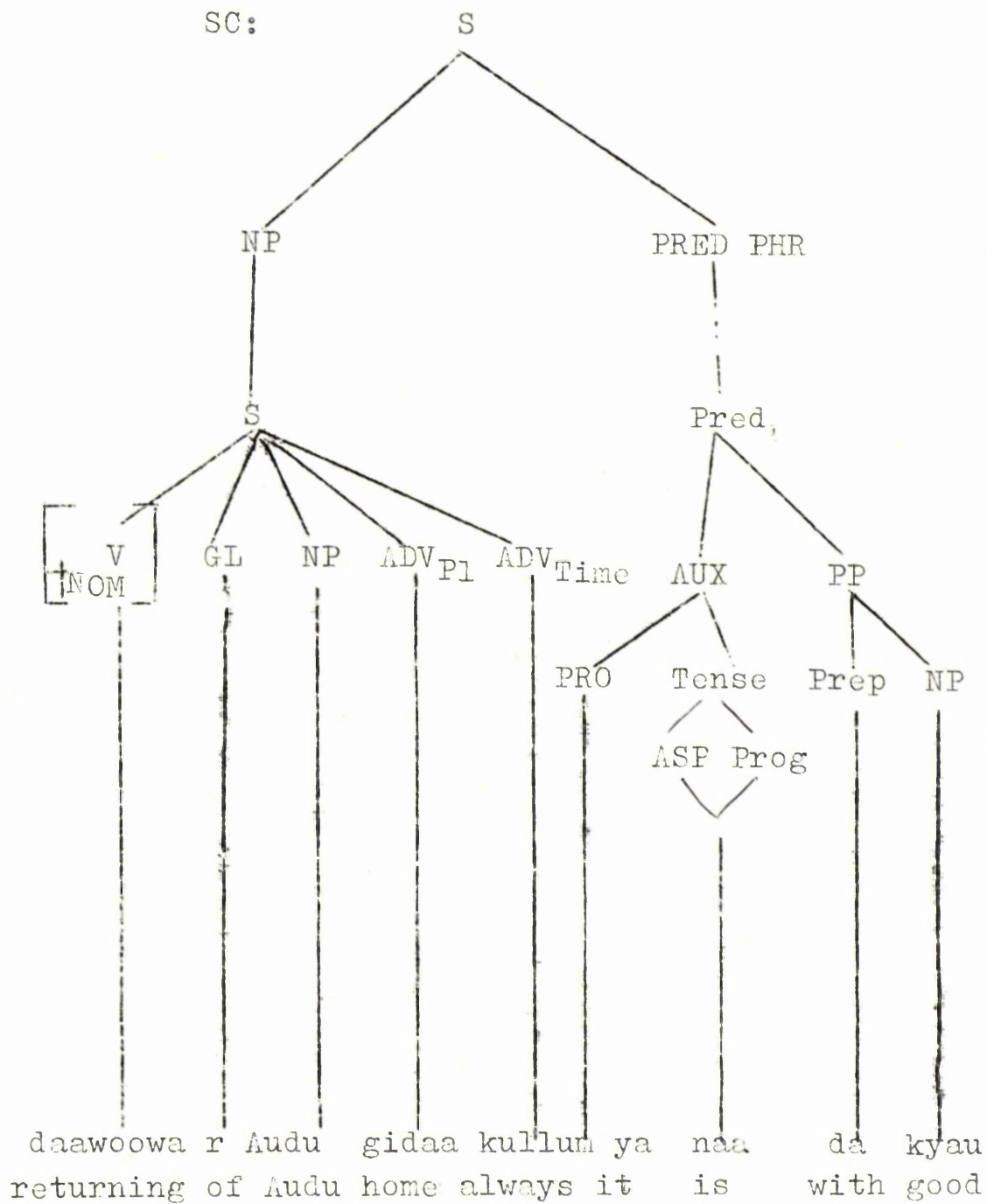
In the unmarked case, this transformation operates on ~~intransitive~~ verbs. It may operate on transitive verbs too (as shown), but the other two transformations are more natural with transitive verbs.

The following tree diagrams illustrate the operation of T-Nom₁ on a selection of sentences containing intransitive and transitive verbs:-

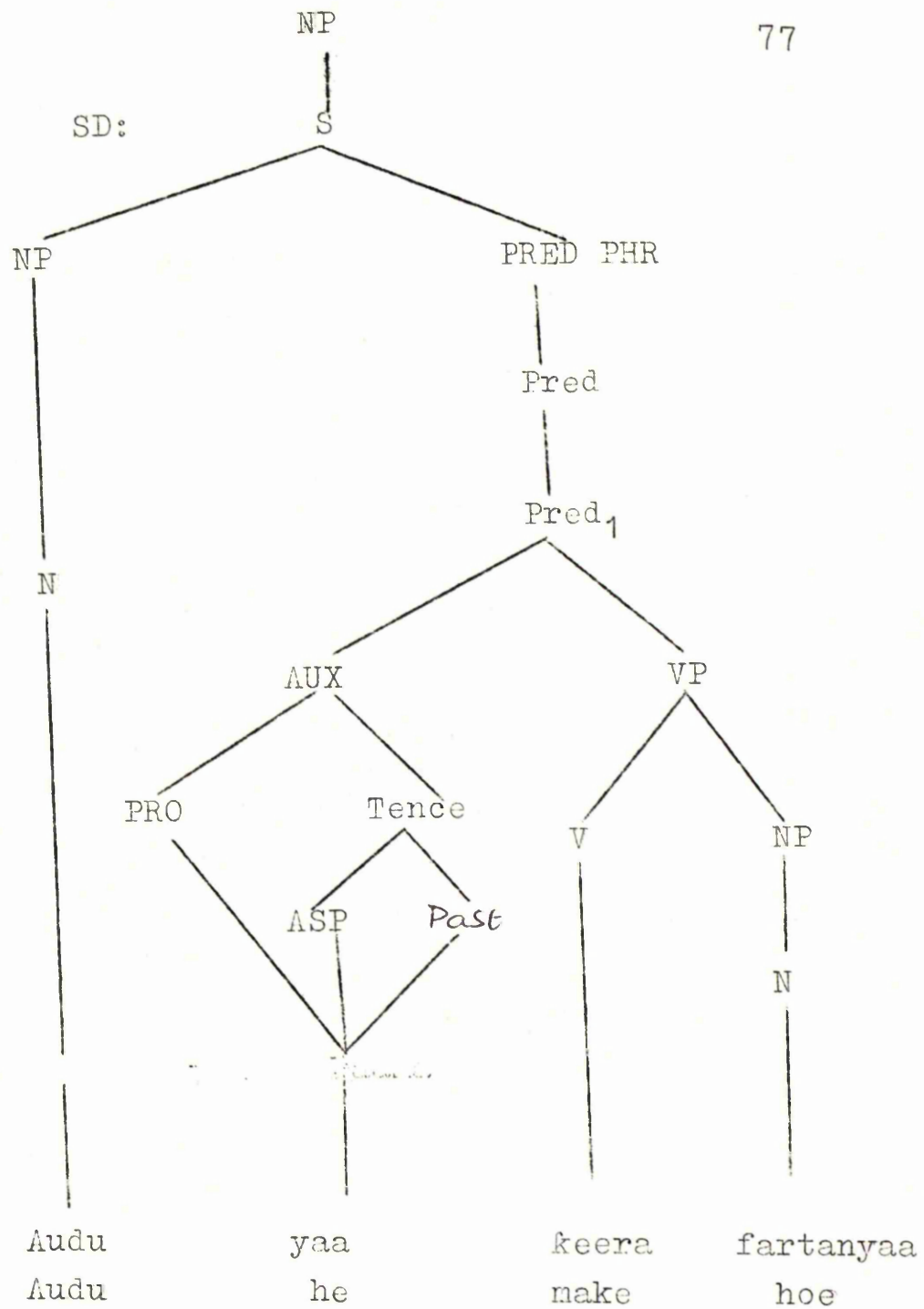
SD:



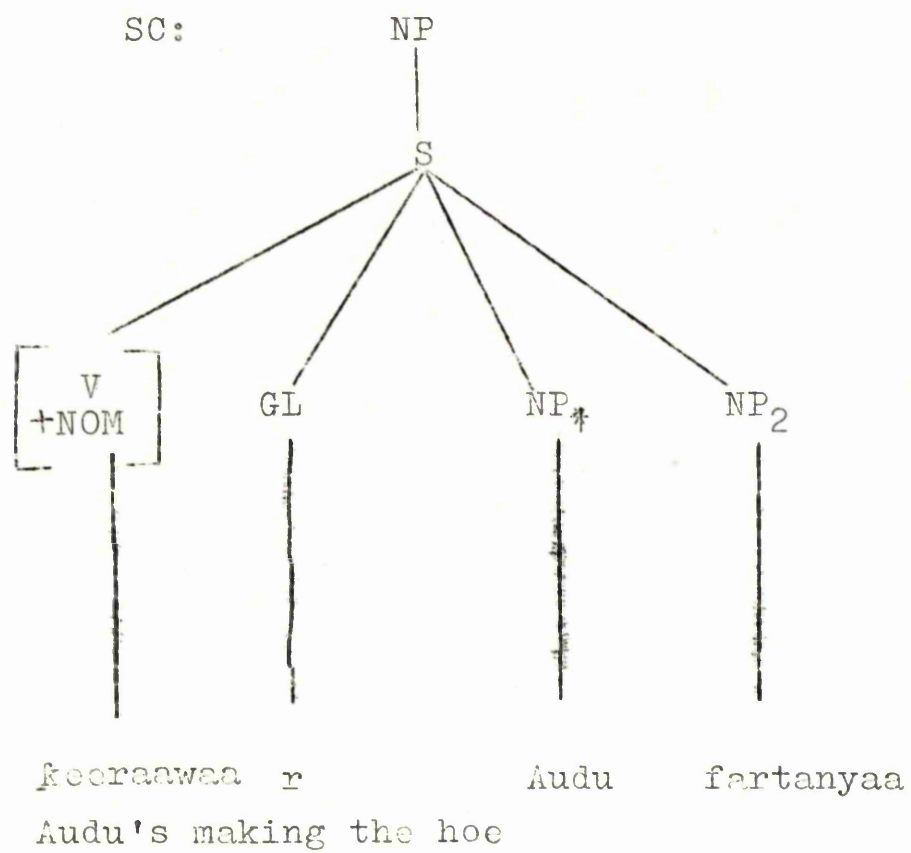
Áudu ya daawoo gidaa kullúm yá naà dà kyáu
 Audu he return home always it is with good
 daawoowa-r Áudu gidaa kullúm yá naà dà kyáu
 Audu's always returning home is good



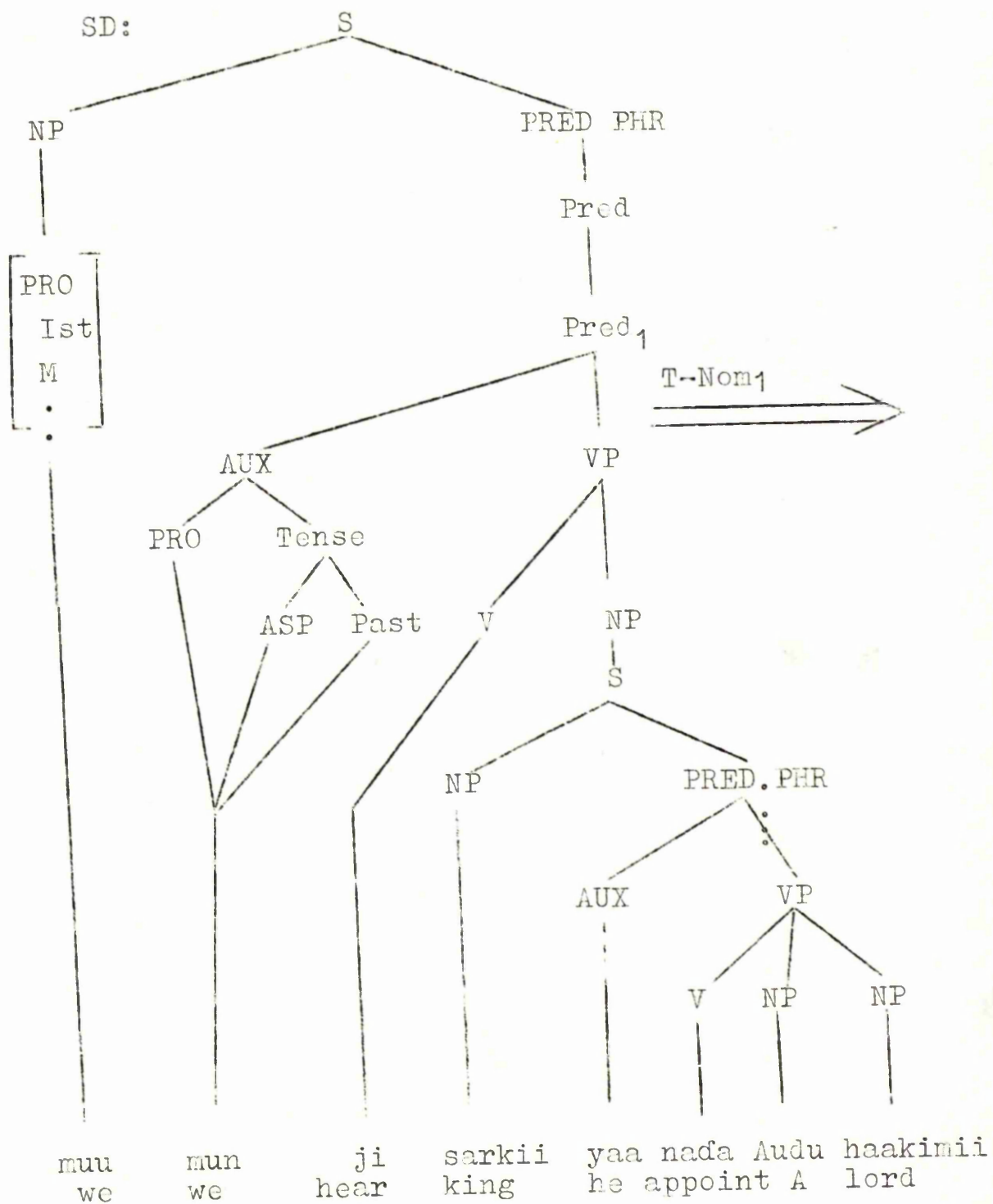
daawoowa-r Audu gidaa kullum ya naa da kyau
 Audu's always returning home is good.

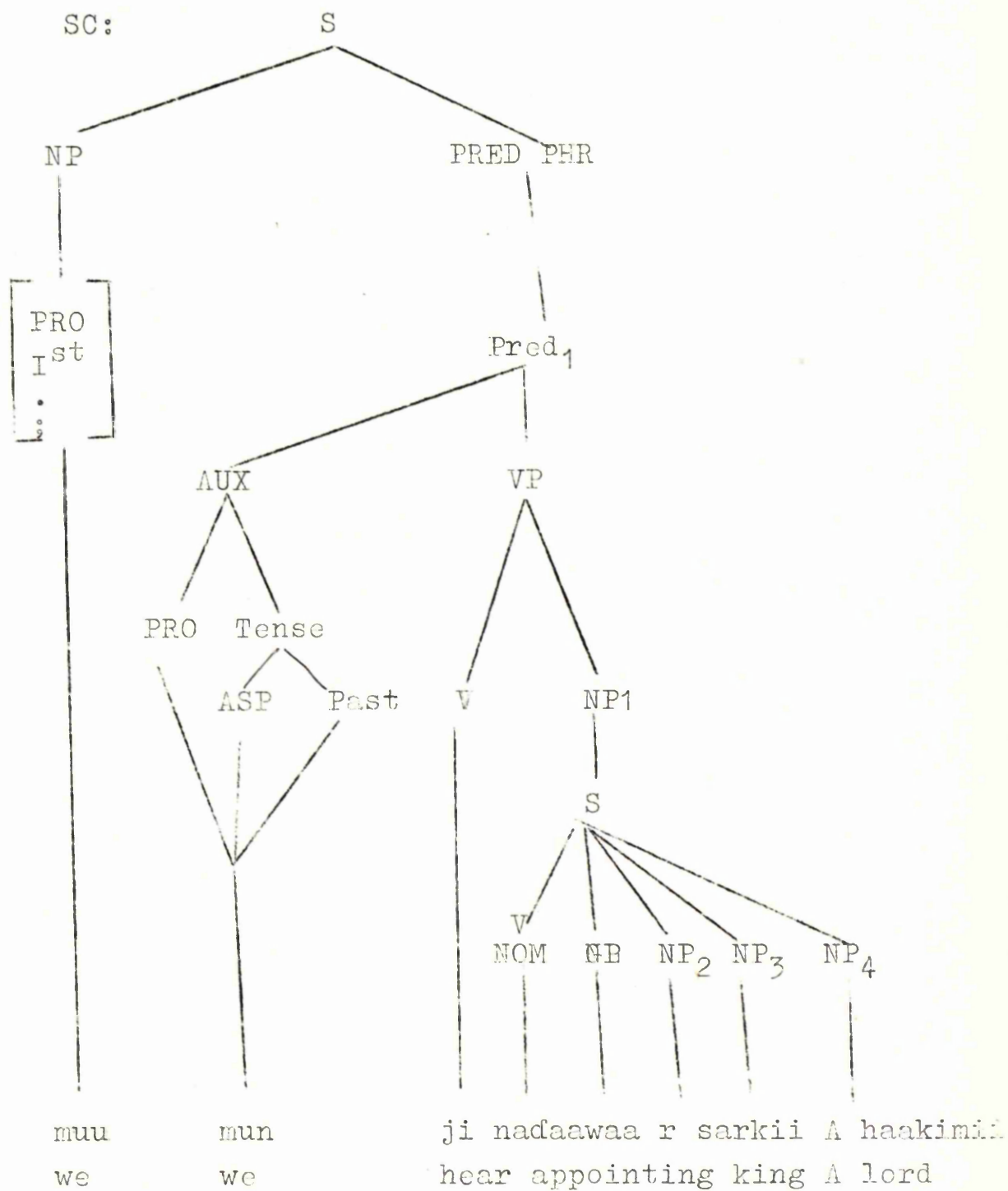


T-Nom₁



cf example 156





cf example 158

T-Nominalization₂:

This rule is restricted to single transitive sentences only i.e to sentences with verbs which take only one object. Here, the whole of the VP is considered as a single item and nominalizes accordingly. The nominalized VP occurs as the left most element of the embedded sentence, the subject is joined to it by the genitive link and the various adverbials follow the subject.

This rule can be formalized in the following way:

SD: X ((NP AUX V ((da) N)_{NP} (ADV))_S)_{NP} Y
 1 2 3 4 5 6

SC: 1 ∅ ∅ [4] +GL+ 2 5 6
 +NOM

Conditions: (1) the object NP contains no modifiers.

(2) the embedded sentence does not contain
 Emph.

Examples:-

160. (a) Audù yáá kéérà fártányáá →
 Audu made a hoe.

(b) kéérà fártanya-r Audù
 Audu's making the hoe.

161. (a) Audù yáá yàrdà dà Garbà →
 Audu trusts Garba

(b) yárdàà dà Garbàn Audù -- Audu's trusting G

When any kind of modifier follows the object this transformation is not possible. Therefore 162 is ungrammatical:

162. * k'eerà f'artányàà kyákkyáawá-r Áúù
 Audu's making the beautiful hoe
 (from: Áúù yáá k'eerà f'artányàà kyákkyáawáá)
 Audu made a beautiful hoe.

The occurrence of a modifier on the object necessitates the application of T-Relative Nominalization.

T-Relative Nominalisation:

This rule, like T-Nom₁, also operates on double transitive, transitive or intransitive sentences. But here it is the whole VP (as in T-Nom₂) that is nominalized and front-shifted and not the verb alone.

The surface characterization of the nominalized sentence after the application of T-Rel Nom is quite different from that realized after the application of T-Nom₁ or T-Nom₂: in T-Nom₁ or T-Nom₂ the subject is joined to the gerundive nominal by the genitive link while in T-Rel Nom the gerundive nominal (the nominalized VP) is modified by a relative clause.

This rule can be formalized in the following way:

T-Rel Nom.

SD:	X	NP ₁	AUX	V	NP ₂	Y
	1	2	3	4	5	6
SC:	1	5	da	2	3	4 6

Examples:

163. kóomáawaa gidaa dà Audù zai yi
returning home which A will do

(from: Audu zai (yi) koma gidaa)
will(do) return home

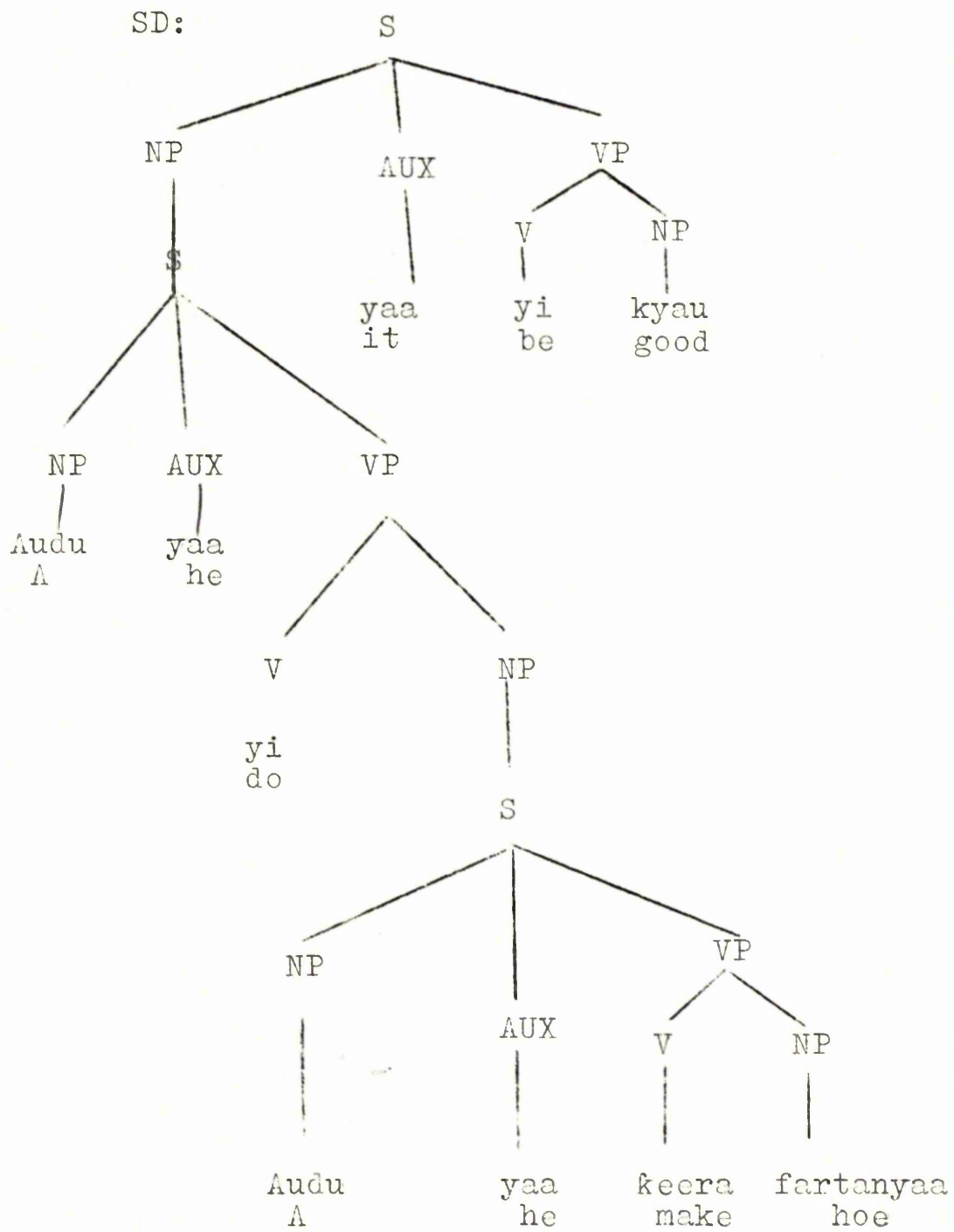
164. kéera fártányaa dà Audù yá yi
making hoe which A he did

(from: Audu yaa (yi) keera fartanyaa)
he (do) making hoe

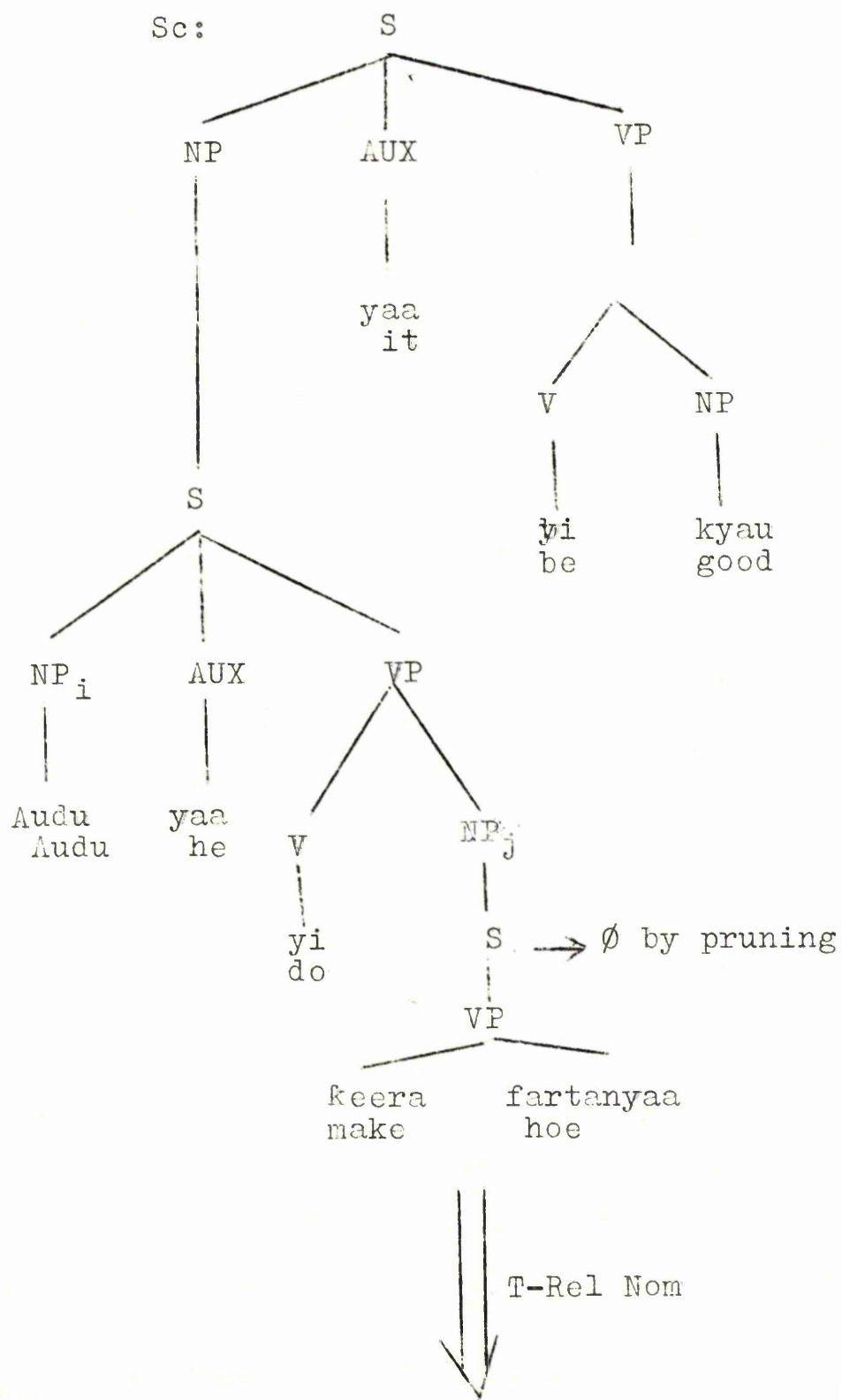
165. náda Audù háakimii dà sárkii yá yi
making A lord which king he did

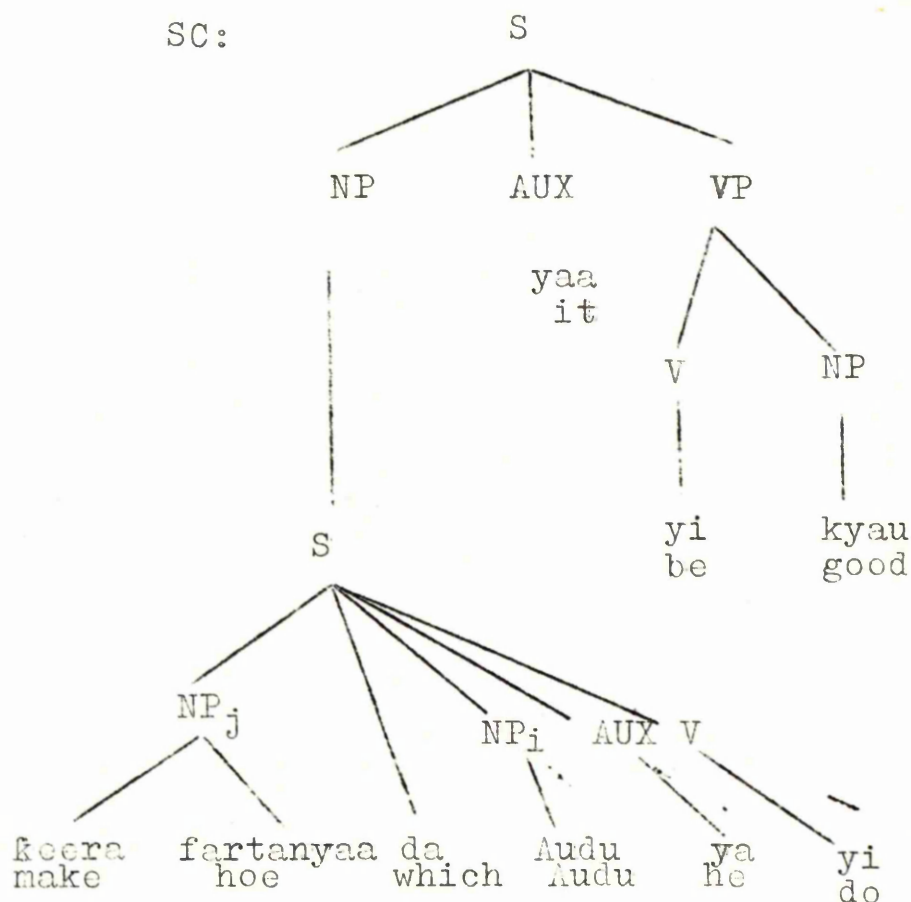
(from: sárkii yaa (yi) náda Audù háakimii)
he (do) making A lord

The following tree diagrams illustrate the operation of T-Rel Nom:



T-EMBEDDED SUBJECT DELETION





viz. T-EQUI: NP_i AUX V (NP_i AUX X)_S

1 2 3 4 → 1 2 ∅ 4

T-Rel Nom. NP_i AUX V NP₂

1 2 3 4 → 4 da 1 2 3

The relative clause retains the tense of the nominalized sentence as shown in the examples above.

If the nominalized sentence contained adverbials, these adverbials occur either just before the relative clause which modifies the gerundive nominal or after it e.g:

Although all sorts of adverbials can occur either immediately before or after the relative clause Time and Place adverbials seem more natural when they occur after the relative clause (i.e away from the nominalized VP) while all other adverbials seem more natural when they are before the relative clause (i.e when they are near the VP). This obviously suggests that Place and Time adverbials are different from the rest of the adverbials, and since Time and Place are more acceptable when they are at the furthest position away from the gerundive nominal (i.e the nominalized VP) and the others are more acceptable when they are near it, this fact can be cited as evidence for putting all adverbials other than Time and Place within the VP.

CHAPTER 4

AGENTIVE AND PAST PARTICIPIAL NOMINALS.1. The Agentive Nominal:

The compound morpheme na.....i can be suffixed to a fairly large number of Hausa verbs to form the so called agentive nominal.⁽¹⁾ The agentive nominal so formed can be feminisedⁿⁱ by the feminine suffix -yaa and pluralized by the plural morpheme suffix -aa e.g.

dink-	"to sew"	<u>madinkii</u>	"a tailor"
		<u>madinkiyaa</u>	feminine
		<u>madinkaa</u>	plural
gin-	"to build"	<u>maginii</u>	"builder"
		<u>maginiyaa</u>	feminine
		<u>maginaa</u>	
shaa(y)-	"to drink"	<u>mashaayii</u>	"an alcoholic"
		<u>mashaayiyaa</u>	feminine
		<u>mashaayaa</u>	plural

Prima facie it would appear reasonable to derive such agentive nominals from underlying verbs. However, there are two pieces of evidence which militate against

(1) cf Abraham: The Language of the Hausa People, (P.41).

X this analysis. Firstly, the semantic relationship between the verb and the agentive nominal is by no means regular as witness the examples just given and those on page 91 below. Secondly, there are some agentive nominals such as:

<u>mákeetácii</u>	"acruel person"
<u>mamagancii</u>	"a talkative person"
<u>magidancii</u>	"a house-holder"

which do not have verbal forms from which they can be derived at all, but rather come from underlying nouns—specifically kèetaa "cruelty", maganàa "speech", and gidaa "a house".

Moreover, these are different again from a further class of noun which can be verbalized by the addition of the suffix -(a(n)t e.g.

gaggawaa (haste)	<u>gaggauta</u>	"to hasten"
mùtùm (a human being)	<u>mùtùmtà</u>	"respect"
bàakóo (a stranger)	<u>bakuntà</u>	"to be a stranger"
wùyáa (difficulty)	<u>wuyaata</u>	"to be scarce/difficult"
tsánanii (intensity)	<u>tsananta</u>	"to intensify"

some (but only some) of which allow a secondary nominalization morphologically identical to the agentives e.g. mawuyàacii "something scarce", matsanàncii "something

intense", but whose meaning is clearly not agentive.

In other words, we have an extremely irregular and unpredictable distribution of nominals. One possible explanation for this might be that putative verbal forms used to be active but have now become extinct⁽¹⁾, leaving only the "agentive" form, or alternatively we might postulate a dummy verbal form for such nouns which is used only in forming the "agentives" and nowhere else.

All this evidence, however, supports deriving such nominals lexically rather than transformationally because deriving them transformationally would mean putting many ad hoc restrictions on the transformation in order to account for some verbs' not having agentives and some agentives not having verbal roots etc..

Moreover, as recorded, the semantic relationship between the various agentive nominals and their respective verbs (where these exist) is not regular at all. Further evidence of this is provided by the following ~~part~~ types of agentive:

(1) But there is no evidence of survivals either in old dictionaries or current dialects.

Group i:

mákeetácii	" a cruel person"
másallàacii	"one who prays (very much)"
mágùjii	" a fast runner"
maroowacii	" a stingy person"
máyàudàrii	"a deceitful person"
mashàayii	"an alcoholic"

Group ii:

mádinkii	"tailor"
máginii	"a builder"
másaakii	"a weaver"
masassakii	" a wood carver"

Group iii

matambayii	" a questioner"
matafiyii	" a traveller"
mágàajii	" an heir"
mamacii	" a deceased person"

The nominals in group (i) denote either one who performs an action so intensively or so frequently that it has become almost a habit of his; or a person (or thing) possessing a certain characteristic (e.g. maroowacii

a person characterized by roowaa "stinginess"). The nominals in group (ii) denote one who performs an action as his occupation while those in group (iii) denote just one who performs an action, though not necessarily by habit or occupation.

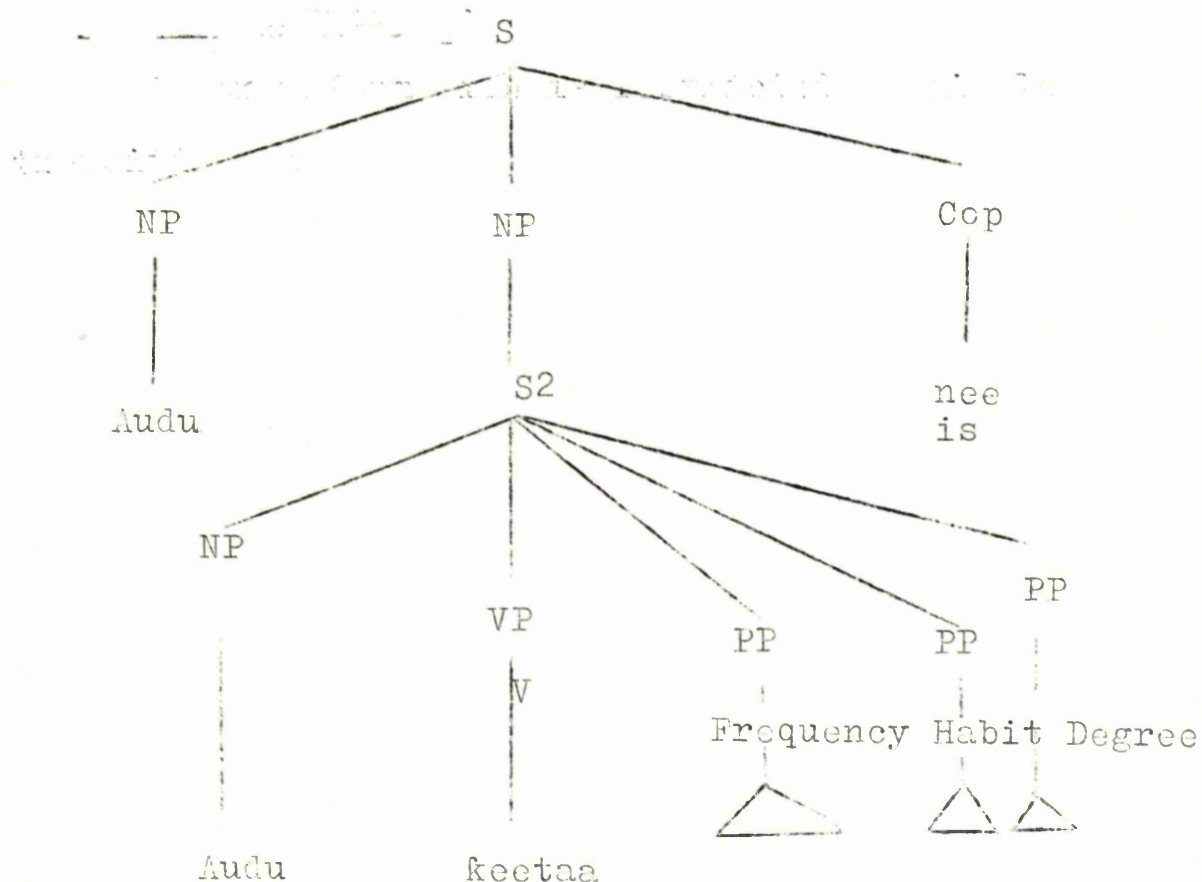
It is very difficult to account for these discrepancies in the semantic relationship between these agentive nominals and their respective verbs transformationally and to describe simple sentences such as:

167. Aúù mákèetácii nèè
Audu is a cruel person

168. Aúù mákèerii nèè
Audu is a black smith

169. wání mātāfiyīi yāá zóó
one traveller
a certain traveller has arrived

we would require the following structural description:



i.e a whole bunch of dummy adverbials must be assigned to S_2 in order to account for the semantic idiosyncrasies of the agentive nominal and then be deleted by the agentivization transformation.

This very complicated analysis can easily be avoided if we simply put the agentive nominal directly in the lexicon where its various idiosyncrasies will then be shown as a bunch of semantic features. We can thus represent any agentive nominal in the following way:

X
+NOM
+AGENT

which would in fact be a sufficient representation for class (iii) and then class (i) would have added the feature $[+INTENSITY + HABIT]$ and class (ii) the feature $[+OCCUPATION]$, and where X represents a lexical item which may not belong exclusively to any grammatical category. In other words we have a partially unspecified formative $[X + NOM]$ which may be further specified as AGENT ; OCCUPATION etc. which further features will condition the relevant morphological process of derivation.

It will, incidentally, be necessary to represent in the lexical entry the fact that agentive nominals (i) and (iii) are in free variation with a construction involving the particle mai followed by a dynamic noun e.g.

mákàryàcìí - mǎi kǎryǎǎ " a liar "

(possessor of lies)

mároowàcìí - mǎi róowǎǎ " a stingy person "

mátàfiyìí - mǎi tàfiyǎǎ " a traveller "

whereas class (ii) agentives do not allow this variant .

Thus we do not have * mǎi gínìí "bullder", * mǎi rínìí dyer.

2. The Past Participial Nominal:

The so-called "past participle" in Hausa which normally functions as an attributive or predicate adjectival in surface structure (cf Abraham L.H.P. page 31) is formed morphologically by doubling the final consonant of the verb and adding the suffix -ee. The past participial nominal can be feminized by the feminine morpheme -yaa and pluralized by adding the plural morpheme -uu e.g.

<u>VERB:</u>	<u>Past Part Nom.</u>
gin- "build"	ginánnée "built"
	ginánniyáa "feminine"
	ginánnuu - plural
rin- "to dye"	rinánnée "dyed"
	rinánniyáa - feminine
	rinánnuu - plural
keebe "to set something aside"	
	kéebeééé "set aside"
	kéebeééiyáa - feminine
	kéebeééuu - plural

Past participial nominals can be divided into three groups:-

1). Those which are derived from transitive verbs and refer to the object of that verb: e.g.

dàfáffée "cooked" - from daf- to cook

cìnyáyyée "eaten" - from ciny- to eat

kàryáyyée "broken" - from kary- to break

2). Those which are ^f ^v ~~deri~~ved from transitive verbs and refer to the subject of that verb. (1)

e.g:

fiyáyyée "superior" from fiy- to surpass others

gàagàrárée "troublesome" - from gaagar- to thwart

3). Those which are derived from intransitive verbs e.g.

busháshshée "dried" - from buush- to dry up

gàjìyáyyée "tired" - from gajiy- to get tired

Types 1) and 2) can be formed freely from any transitive verb -- they are one hundred per cent productive and the nominal always retains the original meaning of the verb from which it has been derived: it does not

(1) 1) and 2) correspond to Abraham's passive and active respectively. (cf Abraham L.H.P. Page 31-32)

have any additional semantic connotations. Therefore these types of past participial nominal can best be transformationally derived. The P.P of the intransitive verb has a semantic feature additional to the basic meaning of the underlying verb: specifically INTENSE . Since this feature is regular with all such PP nominals they also can be transformationally accounted for in the same way as the PP's of the transitive verb with, however, the reservation ^h that there are one or two lexical exceptions which do not allow this transformation (e.g. zoo - to come).

Therefore we need three separate transformational rules for the three types of past participial nominal. These can be formalized in the following way:

1.) T-PP₁:

SD:	X	N _i	((PRO V	N _i) _S	Y
			4		
	1	2	3	4 5	6
				PP	
SC:	1	2	∅	[4]	∅ 6
				+PP	

2) T-PP₂:

SD:	X	N _i	(N _i V	NP) _S	Y
			3 4		
	1	2	3	4 5	6
SC:	1	2	∅	[4]	∅ 6
				+PP	

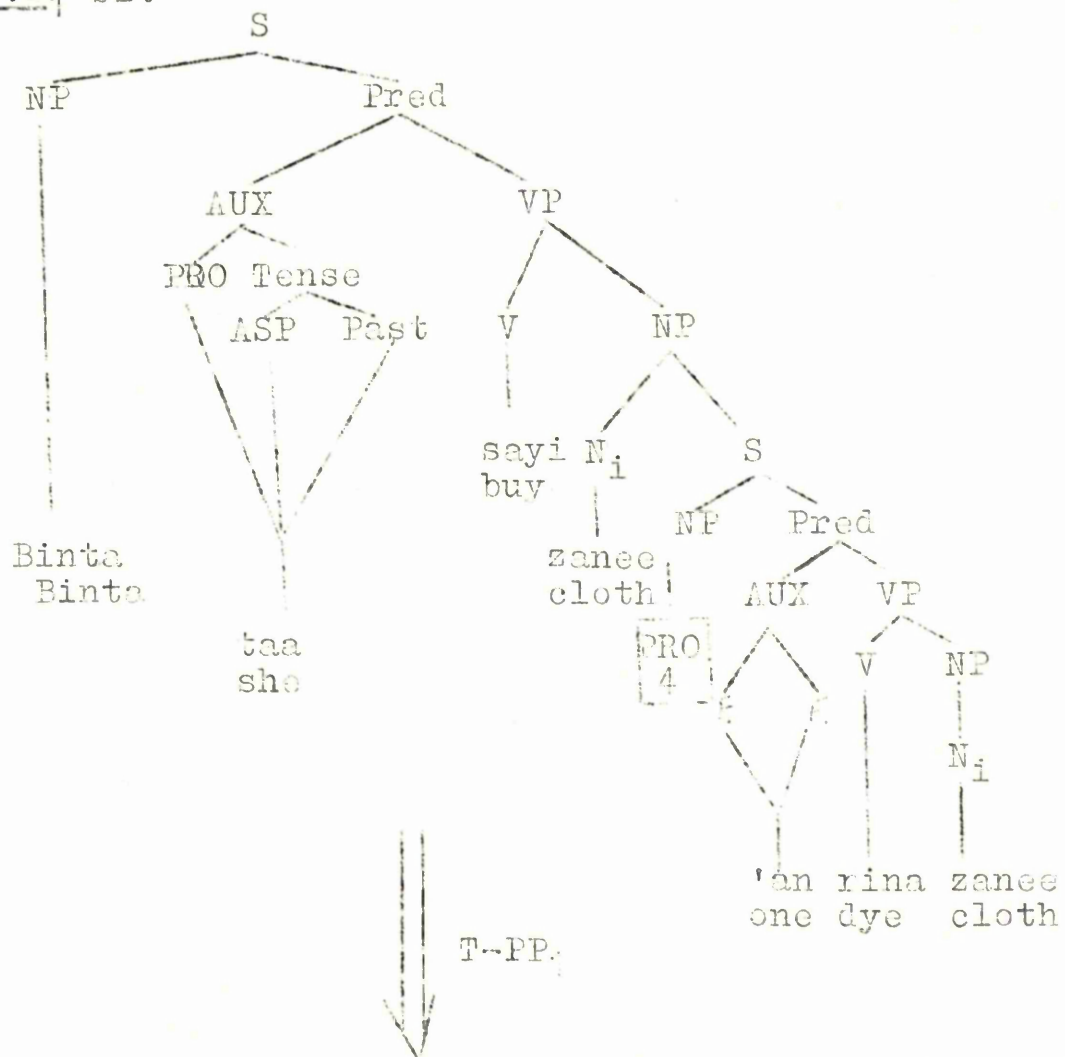
3) T-PP_{Intr}:

SD: X N_i (N₁ V)_S Y
 1 2 3 4 5

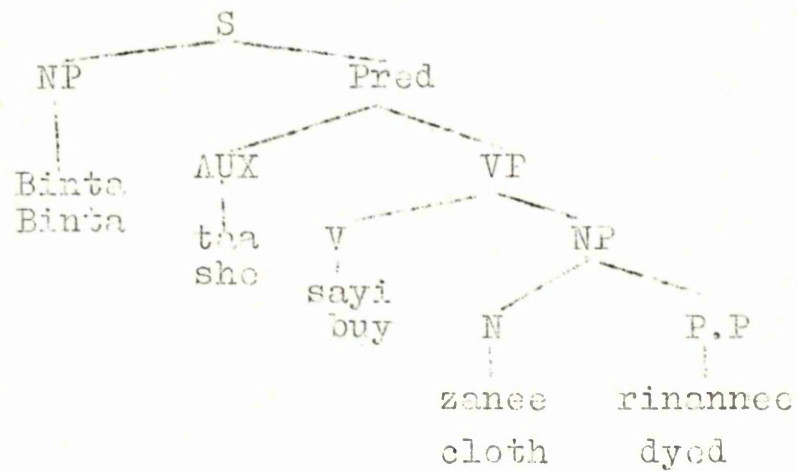
SC: 1 2 ∅ 4 5
 PP

The following diagrams illustrate the operation of these rules:

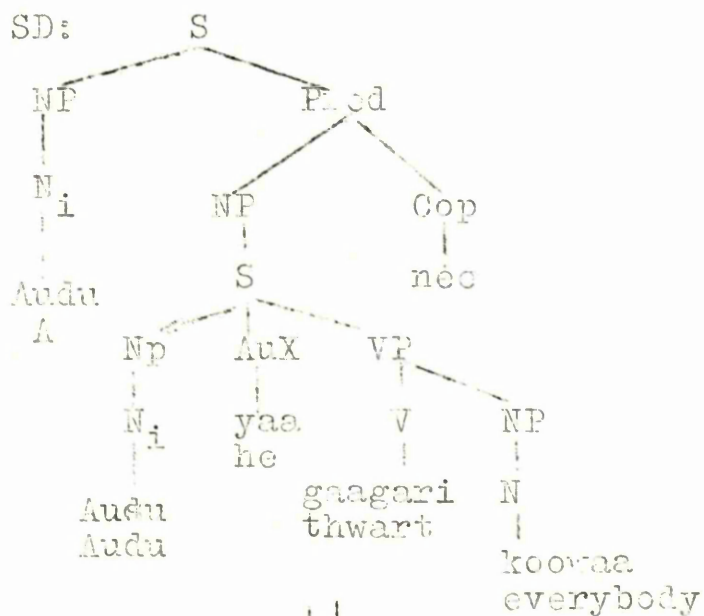
T-P.P.₁ SD:



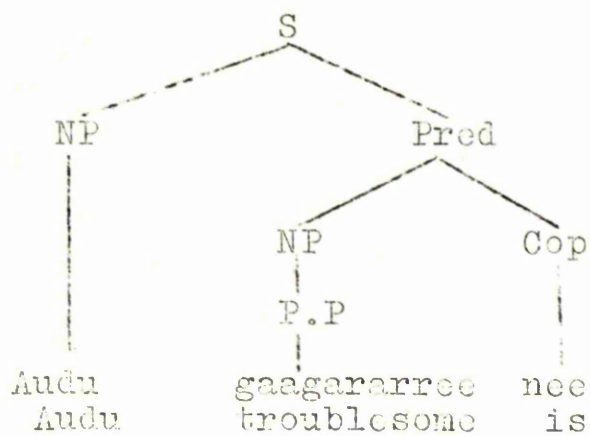
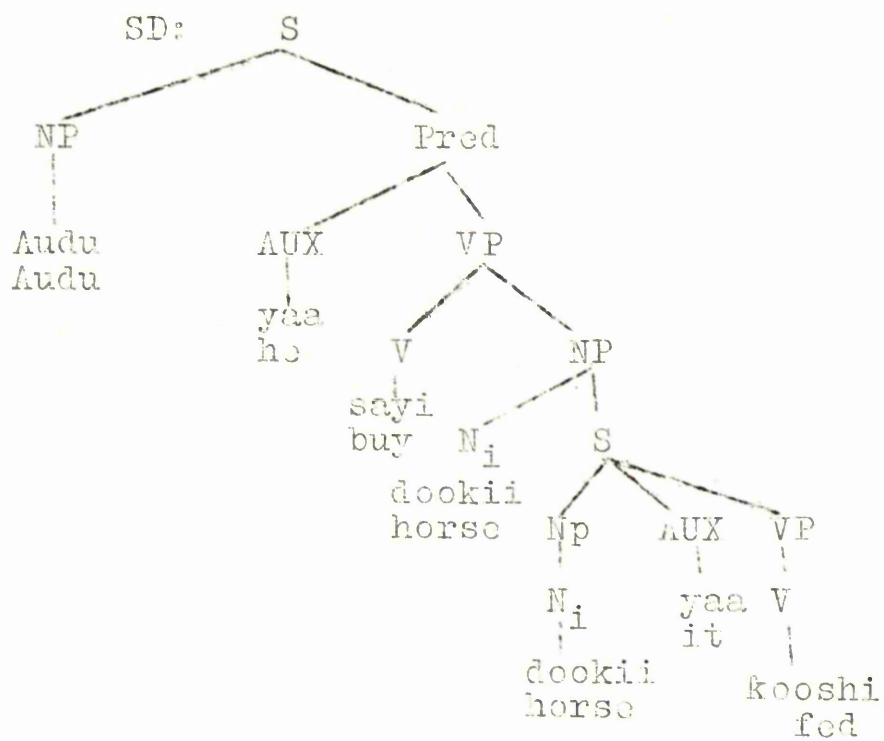
SC:



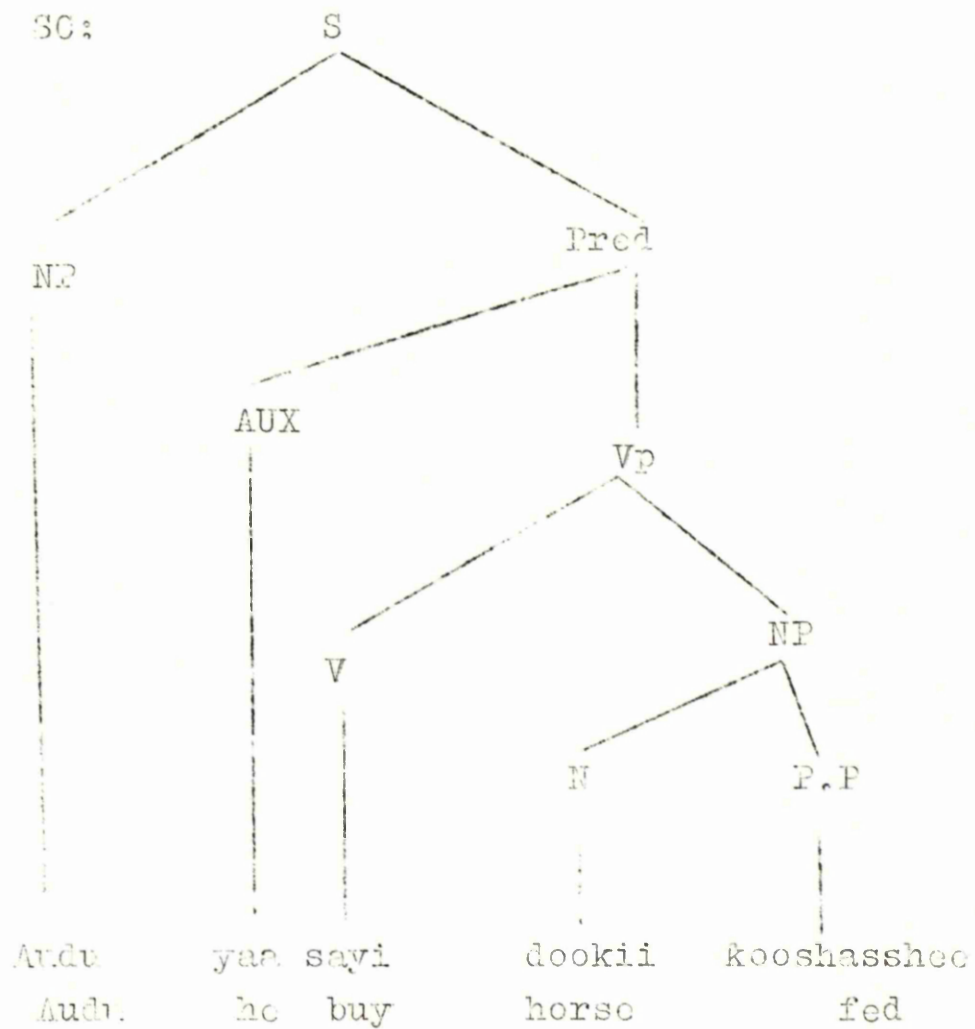
Binta taa sayi zanee rinannee
 Binta bought a dyed cloth.

T-P.P₂T-P.P₂

SC:

T-P.PIntr

T-P.P Intr



Audu yaa sayi dookii kooshassheo

Audu has bought a well fed horse.

APPENDIX A

HAUSA BASE RULES.

$$0. S \longrightarrow \left\{ \left\{ \begin{array}{c} Q \\ \text{Imp} \end{array} \right\} (\text{Neg}) (\text{Emph}) (\text{Part}) \text{NP PRED PHR} (\text{ADV}) \right\}$$

~~Basic~~

The declarative sentence is taken to be basic in Hausa. It can be optionally negated, emphasized or turned into a question or command. The categories Neg, Emph, Q, etc. will trigger various relevant transformations. For present purposes I shall ignore all non-obligatory constituents dominated by S i.e I shall assume that the first rule of the grammar is effectively:

$$B 1. S \longrightarrow \text{NP PRED PHR}$$

The basic division in the Hausa sentence is between the subject and the predicate.

$$B 2. \text{PRED PHR} \longrightarrow \text{Pred} (\text{ADV})$$

$$B 3. \text{Pred} \longrightarrow \left\{ \begin{array}{l} \text{Pred}_1 \\ \text{Pred}_2 \end{array} \right\} \begin{array}{l} (\text{Auxiliary Predicate}) \\ (\text{Non-Auxiliary Predicate}) \end{array}$$

T

The expansion of the predicate phrase accounts for the major types of Hausa sentence.

$$B4. \text{Pred}_1 \longrightarrow \left\{ \begin{array}{l} \text{VP} \\ \text{N}_{\text{loc}} \\ \text{AUX} \left\{ \begin{array}{l} \text{PP} \\ \text{N}_{\text{Stat}} \end{array} \right\} \end{array} \right\} \begin{array}{l} \text{Verbal} \\ \text{Locative} \\ \text{Possessive} \\ \text{Stative} \end{array}$$

The auxiliary predicate is subdivided into four: (1)

Verbal- an auxiliary followed by a VP; (2) Locative --

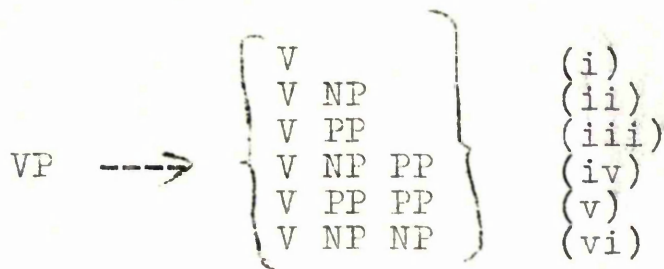
an auxiliary followed by a locative noun; (3) Possessive-

an auxiliary followed ^{by} a PP and (4) Stative --an auxiliary followed by a stative noun.

Examples:-

1. Audù ((yá naa)_{Aux} (kaana kiifii)_{VP})_{Pred₁}
 Audu is catching fish^{catch fish}
2. Audù ((yá naa)_{Aux} (daka)_{N_{loc}})_{Pred₁} Locative
 Audu ya naa daka
 Audu is inside.
 inside_{loc}
3. Audù ((yá naa)_{Aux} (da kúfii)_{PP})_{Pred₁} Possessive
 Audu has money
 with money
4. Audù ((yá naa)_{Aux} (zaune)_{NStat})_{Pred₁} Stative
 Audu is seated.
 seated

The VP is further expanded according to the possible co-occurrence of the verb with other elements such as, direct object, associative object, benefactive etc. Thus we might have:



5. Aúdu yáa ((zoo)_V)_{VP}
Audu has come

6. Aúdu yáa ((ci)_V ('abinci)_{NP})_{VP}
eat food
Audu has eaten (food)

7. Aúdu yáa ((yàda)_V (dà Garbà)_{PP})_{VP}
agree with
Audu trusts Garba

8. Aúdu yáa ((shaawarci)_V (Garbà)_{NP} (gàme dà Ali)_{PP})_{VP}
consult connected with
Audu consulted Garba about Ali

9. Aúdu yáa (('aminée)_V (da Garbà)_{PP} (wàjén tuúkii)_{PP})_{VP}
trust with about
Audu trusts Garba in driving.

10. talakáawaa sún ((zaabi)_V (Aúdu)_{NP} (shuugabansu)_{NP})_{VP}
people elect leader
The people elected Audu their leader

Rules (i) - (vi) can be conflated as:

$$B5. VP \longrightarrow V \left(\left\{ \begin{array}{l} NP \\ PP \end{array} \right\} \right) \left(\left\{ \begin{array}{l} PP \\ NP \end{array} \right\} \right)$$

$$B6. V \longrightarrow CS$$

In addition to strict subcategorization this CS will account for the four so-called grades in Hausa which are realized by different suffixes on the verb:-(1)

- (i) -ee: this suffix marks the grade four which indicates a complete action or an action thoroughly done e.g.

11. Audu yaa ciny-ee 'abincin
Audu has eaten all the food.

- (ii) -oo: marks the grade five verbs which indicate movement towards the speaker. e.g.

12. Audu yaa tunkud-oo Garba
push
Audu pushed Garba towards me.

- (iii) -u: marker of grade six verbs which indicate thoroughness of action. Sentences containing a

(1) Parsons! "secondary grades" in his Verbal System in Hausa op cit. Parsons classifies Hausa verbs into grades according to these suffixes (and other syntactic and semantic features). Note that these grade suffixes are different from the three suffixes which are affixed to the changing verb in Hausa according to the kind of object which follows it : -i after noun objects; -ee after pronoun objects and -aa when no object follows, e.g:-

Audu yaa bug-i Garba Audu hit Garba
Audu yaa bug-ee shi Audu hit him
Audu yaa bug-aa Audu has hit (X).

grade six verb are derived from an underlying sentence containing the unspecified 4th. person as subject. When used with the future tense the verb indicates a possibility. e.g.

13. Audù yáá tùnkùd-ú
Audu was pushed well away

from 14. Aan tùnkùdée Audu
one pushed Audu well away.

15. Audù zai tùnkud-u
Audu can be pushed

from 16. zaa 'à 'iya tùnkùdè Audù
will one be able to
one can push Audu (away)

(iv) -ar (da): the causative grade marker. This grade changes morphologically intransitive verbs into transitives, and transitives into double transitives e.g.

16. Audù yáá zaun-ar dà Garba
sit
Audu seated Garba.

17. Audu yáá ciy-ar dà Garba 'àbíncí
eat
Audu fed Garba food.

B7. AUX ----> PRO Tense

The auxiliary consists of a "pronoun" and a tense marker. These two components of the auxiliary are so amalgamated in the past tense and the Future 2 that they cannot be morphologically separated.

B8. PRO ----> Person, Gender, Number

The pronoun part of the auxiliary indicates the features of person, gender and number of the subject NP.

B9. Person ----> $\left\{ \begin{array}{l} \text{First} \\ \text{Second} \\ \text{Third} \\ \text{Fourth} \end{array} \right\}$

The fourth person indicates an unspecified subject

B10. Gender ----> $\left\{ \begin{array}{l} \text{F} \\ \text{M} \end{array} \right\}$

Nouns in Hausa are either masculine or feminine.

B11. Number ----> $\left\{ \begin{array}{l} \text{Singular} \\ \text{Plural} \end{array} \right\}$

Hausa nouns are either in the singular or plural.

B12. Tense ----> $\left\{ \begin{array}{l} \text{ASP} \left\{ \begin{array}{l} \text{Past} \\ \text{Prog} \\ \text{Habit} \\ \text{Future 1} \\ \text{Future 2} \end{array} \right\} \\ \text{Subjunctive} \end{array} \right\}$

There are six tenses in Hausa: past, progressive, habitual, Future 1, Future 2, and the Subjunctive. I treat the subjunctive as a tense and not as a mood in line with the traditional analysis of tenses in Hausa. (1)

B13. ASP \longrightarrow $\left\{ \begin{array}{l} \text{Relative} \\ \text{General} \end{array} \right\}$

The term "Aspect" is used here as a mnemonic to indicate the difference between the tense of the verb in relative clauses on the one hand and the tense~~s~~ of the verb in non-relative clauses on the other hand. e.g

18. Audù yá nàa zuwàà (Non-relative)
Audu is/was coming

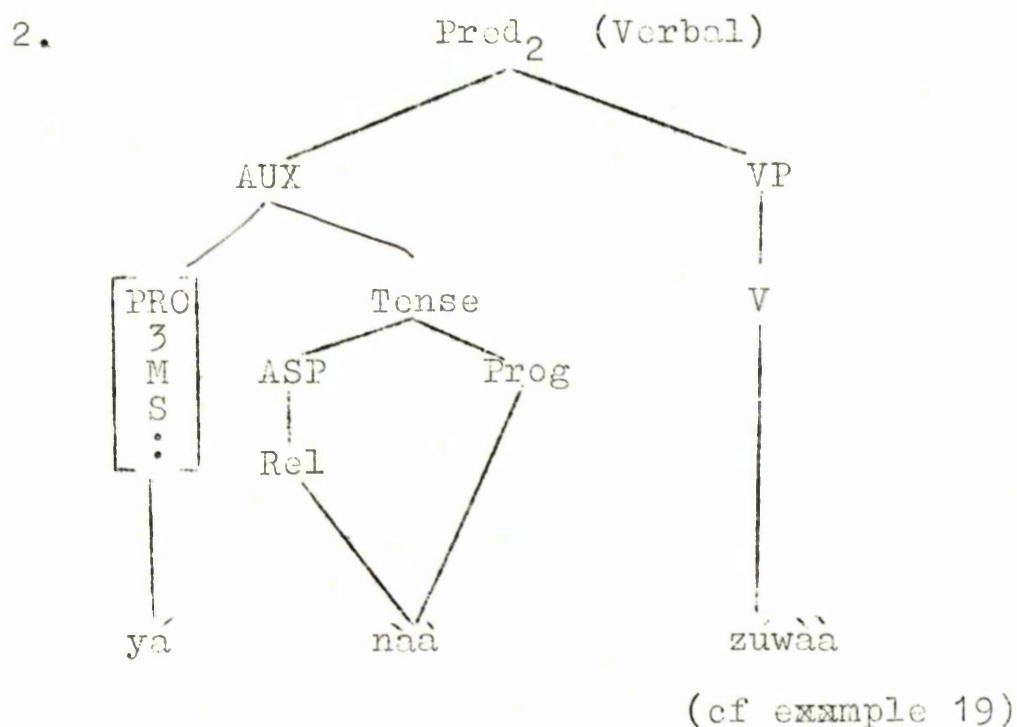
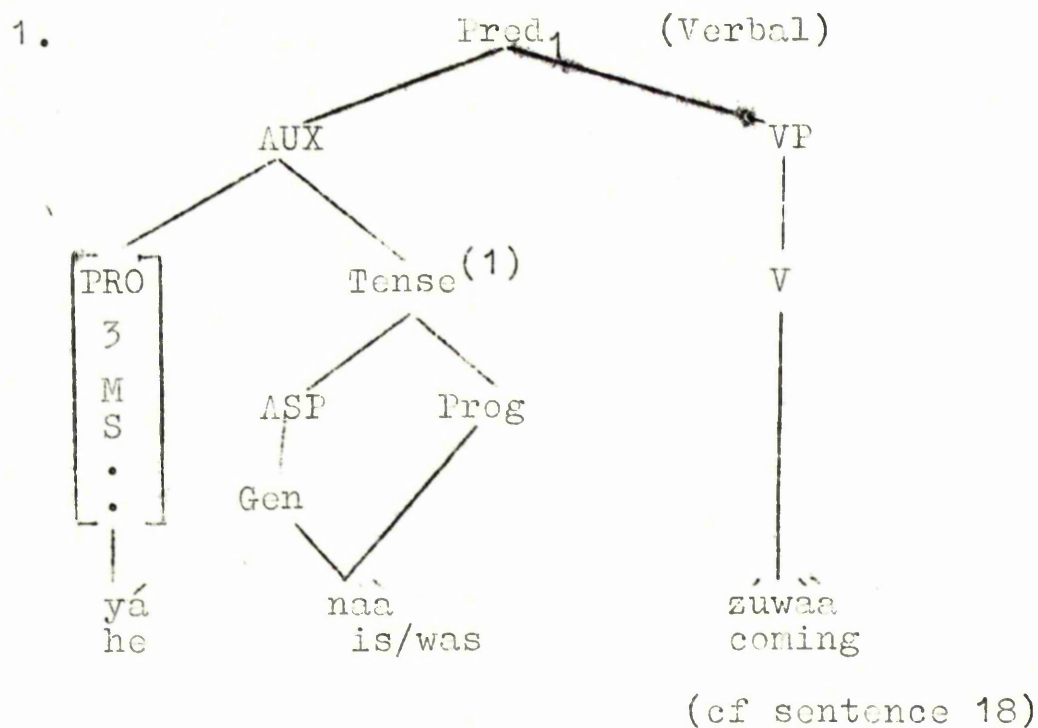
19. lóókàcin dà Audù yá kèe zuwàà (Relative)
time the
the time when Audu is/was coming

20. nàa sánii (cèewàa) Audù yaa zóó (Non-relative)
I know that Audu has arrived

21. nàa sán lóókàcin dà Audù yá zóó (Relative)
I know the time when Audu arrived.

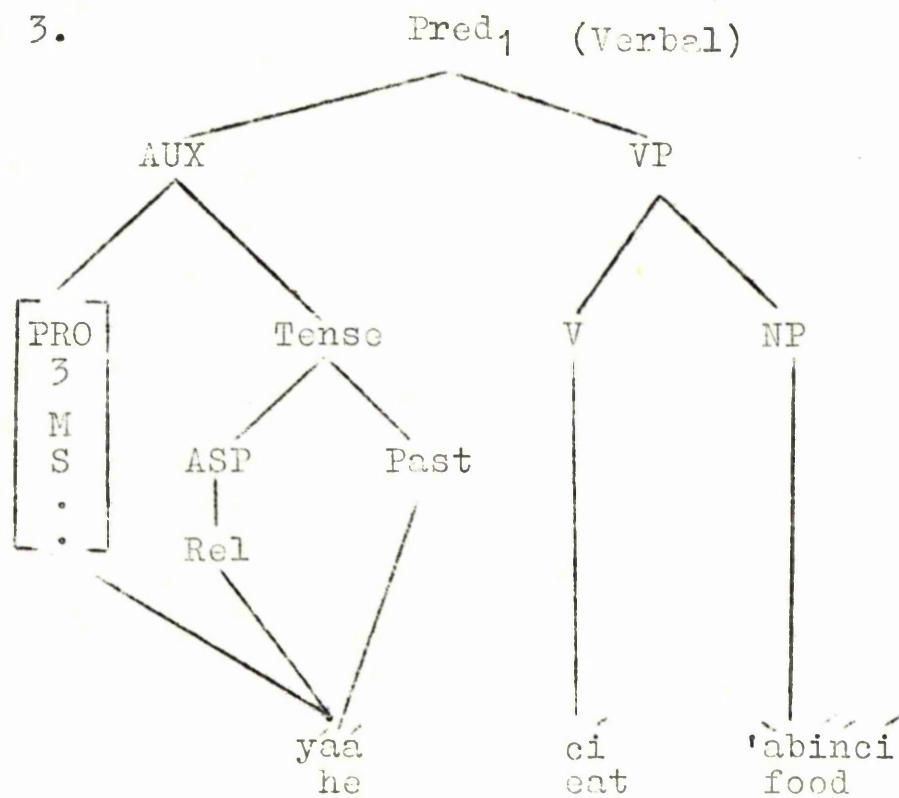
A representative selection of the various types of auxiliary predicate generated by base rules 4-13 is given in the following tree diagrams:-

(1) cf for example, Abraham: Language of the Hausa People (1959) P.7.



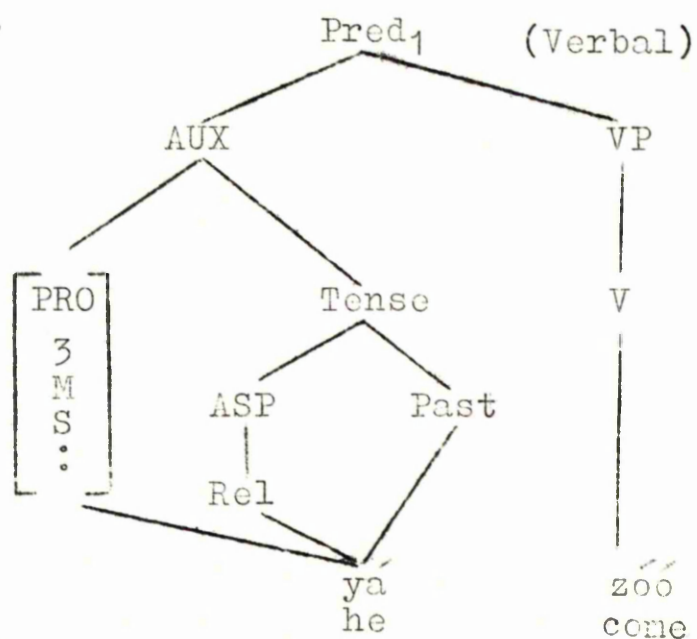
(1) Convergent branches are used where morphophonemic rules have operated on the structure actually generated by PS rules.

2. 3.

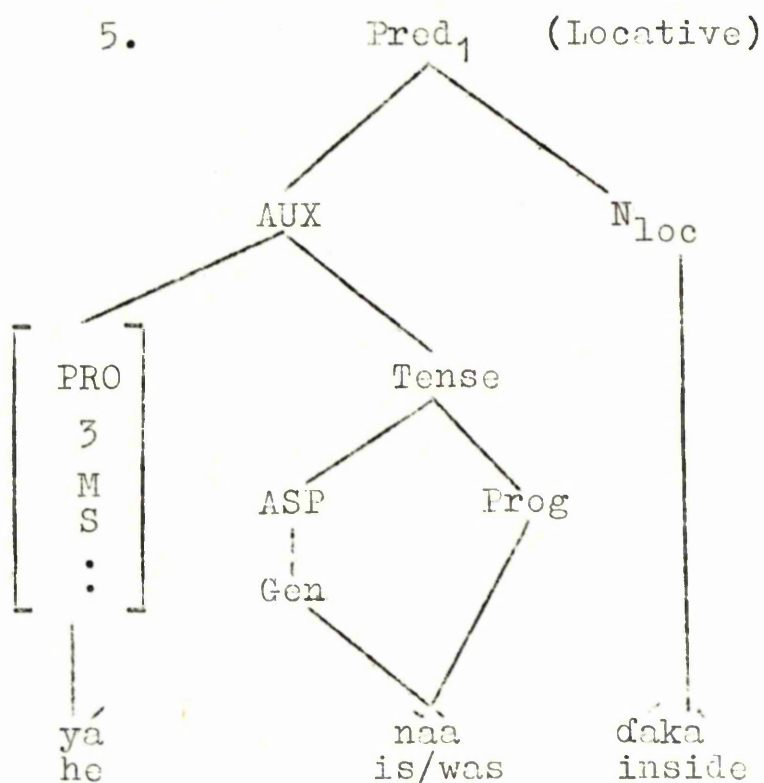


(cf example 6)

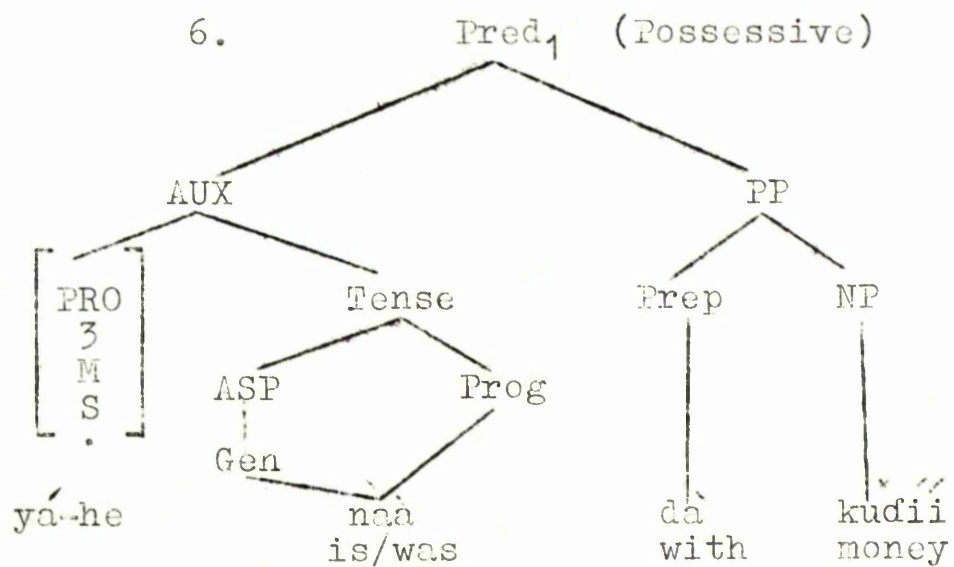
4.



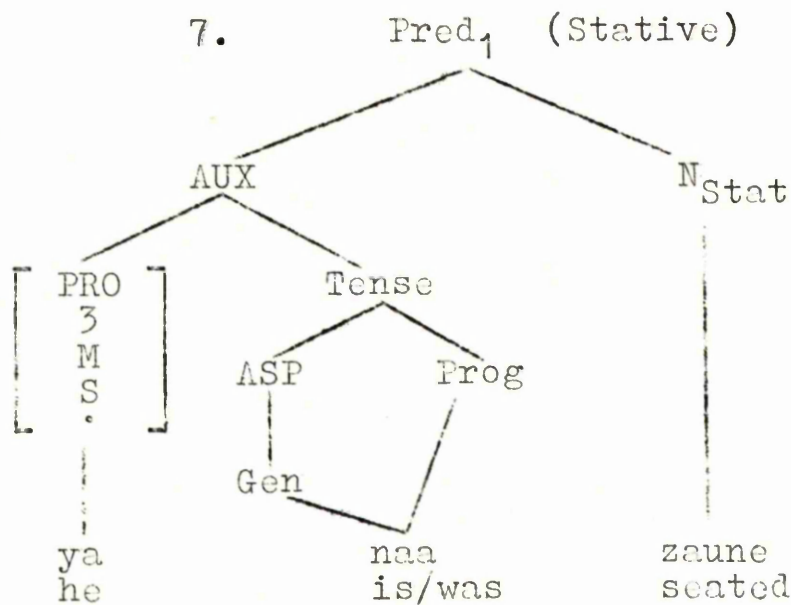
(cf example 21)



(cf example 2)



(cf example 3)



(cf example 4)

B14. Pred₂ \longrightarrow $\begin{cases} \text{Compl Cop} \\ \text{Predicator} \end{cases}$ $\begin{cases} \text{(Equational)} \\ \text{(Existential)} \end{cases}$

The non-auxiliary predicate is either (1) an "equational predicate" consisting of a complement followed by a copula or (2) an "existential predicate" consisting of a predicator particle.

B15. Compl \dashrightarrow $\begin{cases} \text{NP} \\ \text{Adj} \end{cases}$

B16. Cop \dashrightarrow nee

The copula is nee if the complement has the feature [+MASCULINE] or [+PLURAL]. The allomorph cee is used with complements which have the feature $\begin{bmatrix} \text{+FEMININE} \\ \text{-PLURAL} \end{bmatrix}$.

There is tonal polarity between the last syllable of the complement and the copula: e.g.

22. Aúdu maalamii née
 learned man
 Audu is a learned man.

23. Kànde maalamáa cée
 Kande is a learned woman

24. Aúdu dà Kànde maalamai née
 Audu and Kande are learned people

25. Kànde màcè cée
 Kande is a woman.

B17. Predicator \rightarrow (daǎ'akwai)⁽¹⁾

26. (da) 'akwai sanyii 'a Ingila
 cold in England
 dà sanyii 'à Ingila
 England is cold (There is cold in England)

The grammatical function of the NP which comes after the predicator in surface structure e.g.

(1) I am using Fillmore's convention that at least one element of a series embedded in linked parentheses must be chosen. cf Fillmore Case for Case P.28.

(da Allah "there is God" i.e he exists) is not very clear. I tentatively analyze it here as the subject of the ~~ex~~/sistential sentence viz it is immediately dominated by the node S rather than the predicate phrase. But it is obligatorily shifted to the right of the predicator. Note that when a pronoun occurs as the subject of the predicator, the form of the pronoun is the same as the form it assumes when it is in object position e.g.

27. (dà) 'àkwai shì/tà/sù etc
 he she they
 he/she/they exist(s).

compare 27 with 28:-

28. Audù yáá bùgée shì/tà/sù
 Audu has beaten him/her/them

But when the sentence is negated or when only da is used as the predicator the pronoun takes the form it has in disjunctive subject position. e.g.

29. baabù shii/'ita/suu
 he/she/they do(es) not exist.

30. dà shii/'ita/suu "he/she/they exist(s).

Compare 28, 29 with 30-32 below:

30. shii malaamii nēe "he is a learned man"

31. 'ita maalamāa cēe "she is a learned woman"

32. suu maalamāi nēe "they are learned people"

B18. ADV → $\left\{ \begin{array}{l} \text{ADV}_{\text{Time}} \\ \text{ADV}_{\text{Place}} \\ \text{ADV}_{\text{Manner}} \\ \vdots \end{array} \right\}$

This rule subcategorizes adverbials into adverbial of time, adverbial of place, adverbial of manner etc.. Any one of these adverbials or any combination of them may be chosen in a sentence:

33. Audu yāa tafi(kàasuwāa)_{market} Place ('a kàn kèkèé)_{at on bicycle} Manner
(jiya)_{yesterday} Time (dón yā sáyóo náamáa)_{for he buy meat} Purpose

Audu went to the market on a bicycle yesterday to buy meat.

If more than one adverb of place or time occurs in a sentence they are always hyponymously related:

34. Audu yāa gamú dà Gárba ('a Ázàré)_{meet with} Place ('a ùngwár quarters)
mākāamā)_{Place} ('a gidan maaji)_{Place}

Audu met Garba in Azare in Makama Quarters at Maji's house.

35. Audu yaa tafi kaasuwa (jiya)_{Time} (da raana)_{Time}
noon

(da karfèè 'ukù)_{Time}
3 o'clock

Audu went to the market yesterday in the afternoon at three o'clock.

B19. ADV_{Place} → ('a) N_{loc} (da NP)

36. Audu yaa zaunaa ((à) (nàn)_{N_{loc}}) ADV_{Place}
at here

Audu has sat here.

37. Audu yaa zaunaa ('a) (gééfc)_{side N_{loc}} da (Garba)_{NP} ADV_{PL}

Audu has sat beside Garba

38. Audu yaa tafi ((kaasuwa)_{N_{loc}}) ADV_{Place}

Audu went to the market.

B20. ADV_{Time} → (Conj) N_{Time}

Time adverbials are realized by Nouns of Time preceded by an optional time conjunction:

39. Audu yaa daawoo ((tun)_{Conj} (jiya)_{N_{Time}}) ADV_{Time}

Audu has been back since yesterday

The noun ƙoƙaci "time" in Hausa is modified by a relative clause to form when clauses:

40. Audu yá nàa gidàa lóókàcín dà Gárba yá dàawòò
Audu was at home (the time) when Garba returned

"As soon as" clauses are realized by the insertion of the conjunction sai "then (suddenly)" between the relative clause and the main clause:

lookacin

- 41./dà Audù yá kwántaa sai barcii yá d'aukée shí
sleep take away
as soon as he lay down Audu fell asleep

The noun lookacii can be deleted, optionally when the clause is not nominalized, obligatorily when the clause is nominalized in sentences with as soon as adverbs:

42. dà Audu ya kwantaasai bárcii ya dáukeyé shí
(meaning the same as 41).
43. dà kwantaawar Audu sai bárcii ya dáukeyé shí
(meaning the same as 42 and 41).

B21. ADV_{Manner} → { ADV_{Manner}
da N_{Abstract}
kanar NP

B24. Noun ----> CS

Hausa has no definite or indefinite article marker. There is only a referential marker which is added to any noun which has previously been referred to. The referential marker is -r when the noun referred to is feminine singular. Its allomorph -n is used in all other cases:

<u>Noun Indef.</u>		<u>Noun Def.</u>	<u>Noun Ref.</u>
bùdurwāa	"a girl"	bùdurwāa	bùdurwā-r
saurayii	"a boy"	saurayii	saurayi-n
samaarii	"boys"	samaarii	samaari-n
bùduurai	"girls"	bùduurai	bùduura-n

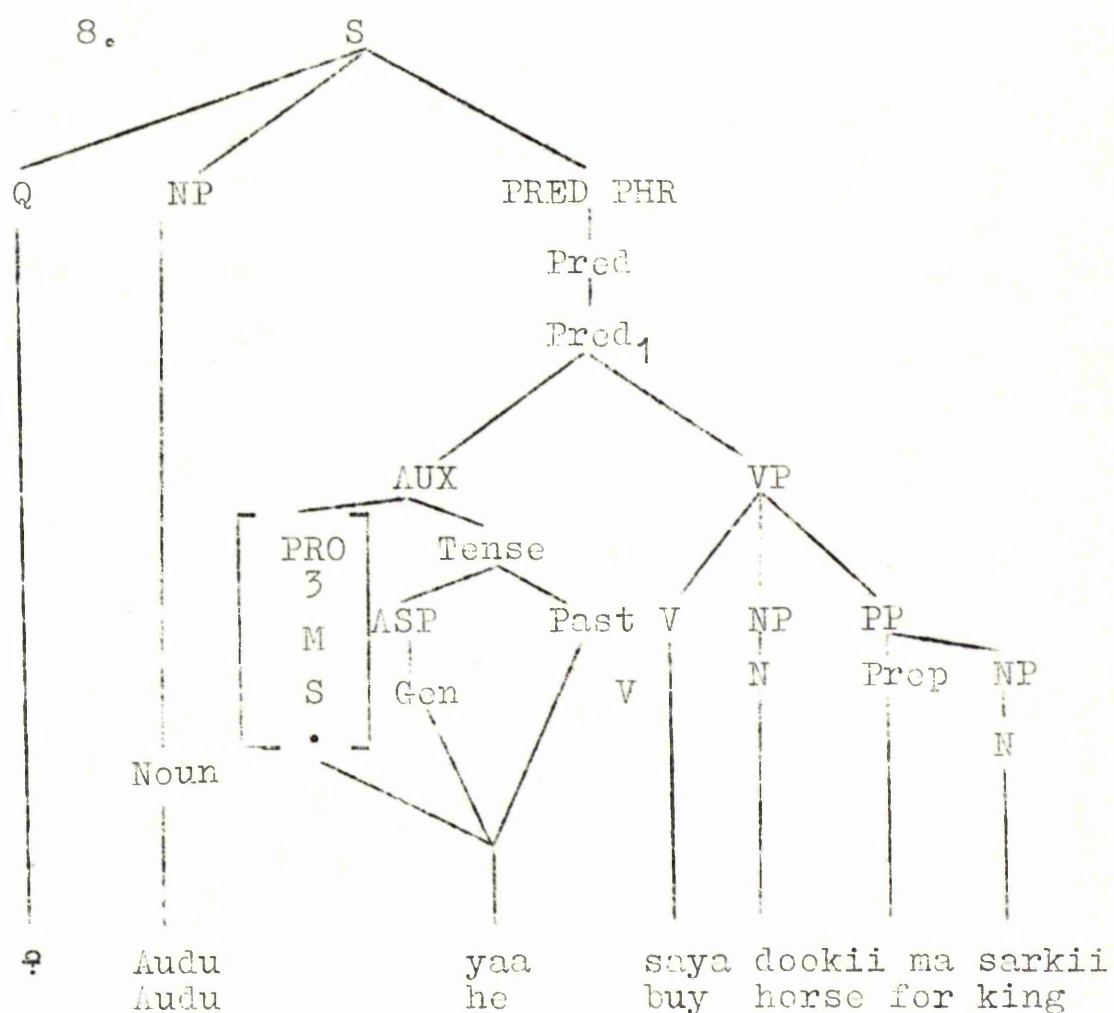
All relative clauses and attributive adjectives and possessive modifiers (i.e. genitives) are transformationally derived from full sentences (cf Appendix B for relevant transformations):

46. (dookin ((dà mu kà sayāa)_S)_{Mod})NP
the horse which we bought

47. (riiga(((r)_{GL} Audu)_S)_{Mod})NP
Audu's shirt.

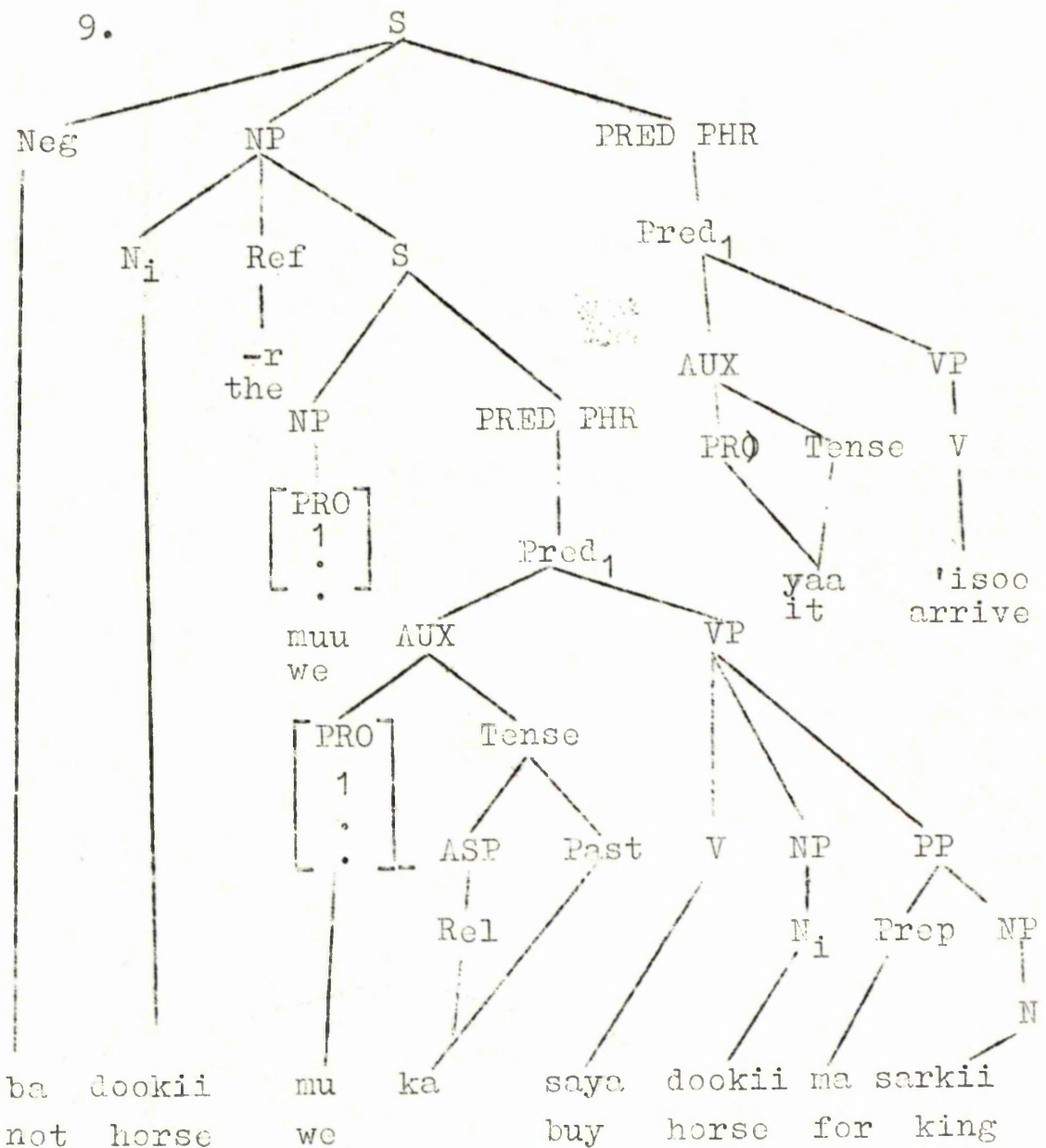
48. (yaarinyāa (((kyakkyāawūyāa)_{Adj})_S)_{Mod})Np
a beautiful girl.

The following tree diagrams give a representative selection of structures generated by the base rules with a minimum of T-rules and morphophonemic rules assumed:-



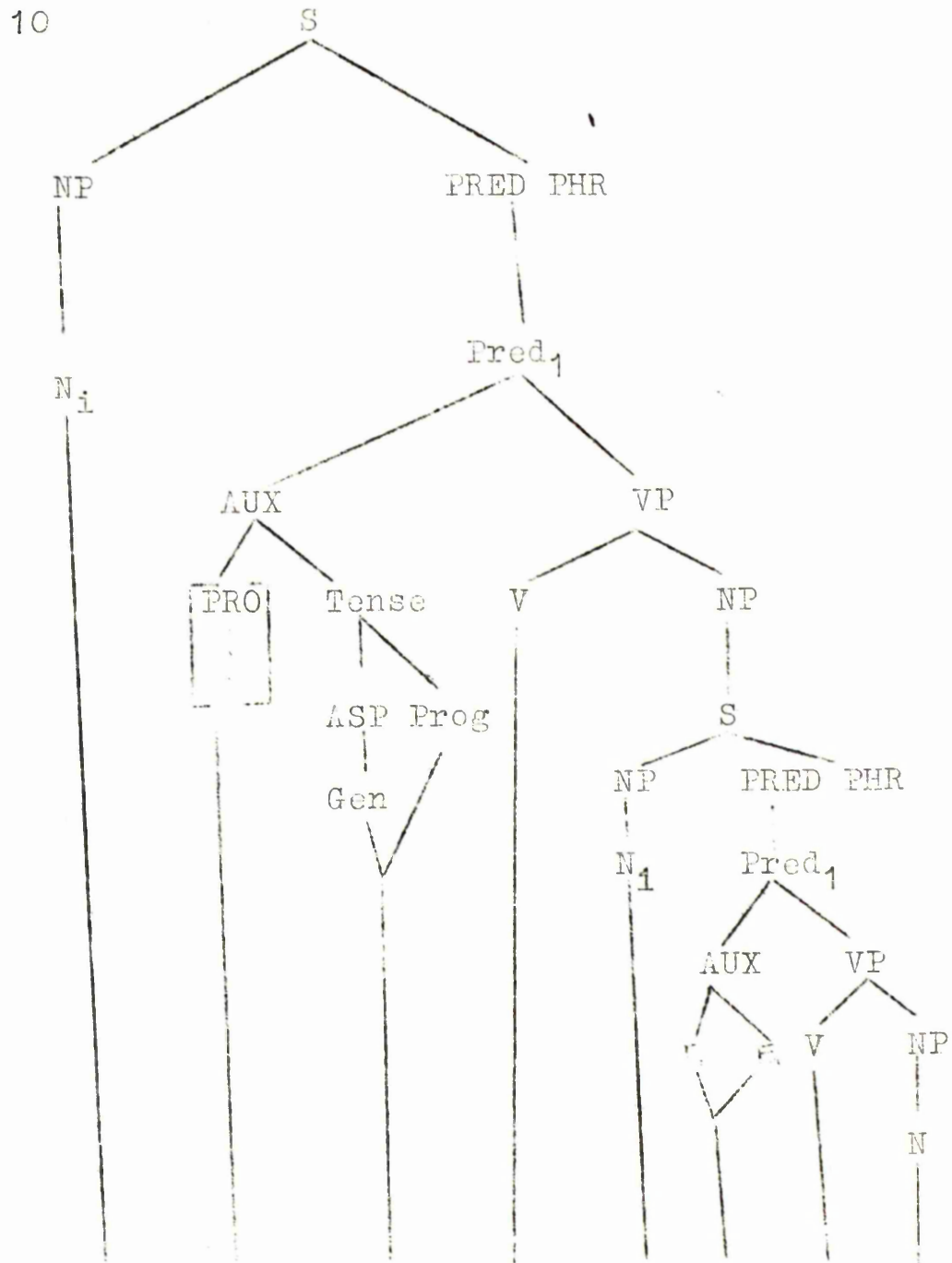
Audu yaa sayaa ma sarkii dookii?

Has Audu bought a horse for the king?



dookin dà mú kà sayàà mà sarkii bai 'isoo bá

the horse which we bought for the king has not arrived



APPENDIX B

TRANSFORMATIONAL RULES.

T1. T-AUXILIARY-PRONOUN DELETION:

SD:	X	NP	(PRO	TENSE)	AUX	Y
	1	2	3	4		5
SC:	1	2	∅	4		5.

Conditions: (i) 3 must be third person
(ii) 4 must be either progressive or
habitual.

This rule will optionally delete the pronoun part of the auxiliary when the tense is progressive or habitual:

49. Aúù yá nàà zuwàà → Aúù nàà zuwàà
Audu(he) is coming Audu is coming.

50. mutaanee su kan zoo ---> mutaanee kan zoo
people (they) habitually come
come

T-24-PRONOUN AND TENSE PERMUTATION:

SD: X (PRO TENSE) AUX Y
1 2 3 4 SC: 1 3 2 4.

Condition: Tense must be Future 1.

The pronoun and the tense marker obligatorily exchange places in the Future 1 tense:

51. *Aúdu yà zaa zóó → Aúdu zai zóó (by later morpho-phonemic rules)
 Aúdu zaa yà zóó → Aúdu zai zóó (by later morpho-phonemic rules)
 Aúdu will come.

T-3. T-RELATIVIZATION:

SD: $X \begin{pmatrix} N_1 \\ 1 \end{pmatrix} \begin{pmatrix} S \\ 2 \end{pmatrix} \begin{pmatrix} NP \\ 3 \end{pmatrix} \begin{pmatrix} Y \\ 4 \end{pmatrix}$ SC: 1 2 da 3 4.

Nouns can be modified by full sentences embedded as relative clauses. The embedded sentence must contain a noun identical to the modified noun. The relativizer da "which/who" joins the modified noun and the embedded sentence.

T4. T-ADJECTIVIZATION:

SD: $X \begin{pmatrix} N_1 \\ 1 \end{pmatrix} \begin{pmatrix} N_1 \\ 2 \end{pmatrix} \begin{pmatrix} Adj \\ 3 \end{pmatrix} \begin{pmatrix} Cop \\ 4 \end{pmatrix} \begin{pmatrix} S \\ 5 \end{pmatrix} \begin{pmatrix} MOD \\ 6 \end{pmatrix} \begin{pmatrix} NP \\ 7 \end{pmatrix} \begin{pmatrix} Y \\ 8 \end{pmatrix}$
 SC: 1 2 ∅ 4 ∅ 6.

A noun can be modified by a copular sentence whose subject must be identical^a to the modified noun and whose complement must be an attributive adjective.

For example the NP dookii farii "a white horse" has the following underlying structure:

11. SD:

```
graph TD
    NP1[NP] --- Ni1[Ni]
    NP1 --- S[S]
    S --- NP2[NP]
    S --- PRED[PRED]
    S --- PHR[PHR]
    NP2 --- Ni2[Ni]
    PRED --- Pred2[Pred2]
    Pred2 --- Compl[Compl]
    Pred2 --- Cop[Cop]
    Compl --- Adj[Adj]
    Adj --- farii[farii]
    farii --- white[white]
    Cop --- nee[nee]
    nee --- is[is]
```

dookii dookii farii nee
horse horse white is

T-RELATIVIZATION

12. SC: NP

N Adj

dookii farii
horse white

T5. T-GENITIVIZATION:

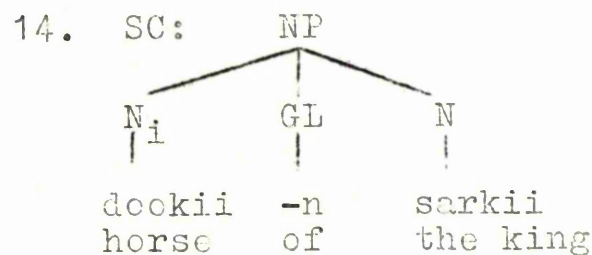
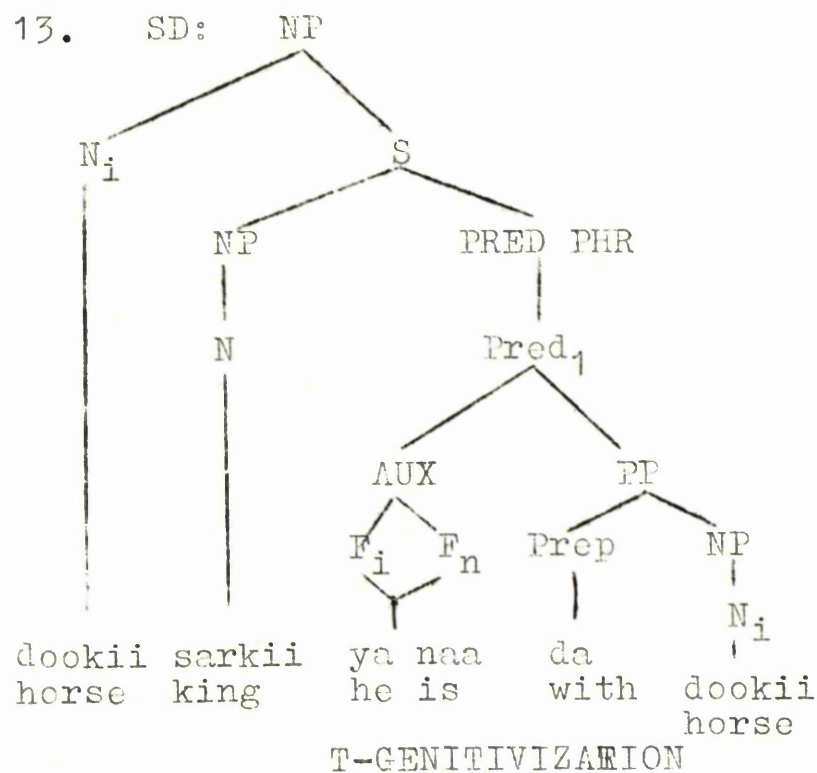
SD: X (N_i (NP AUX da N_i) S)_{MOD})_{NP} Y

SC: 1 2 - GL - 3 \emptyset \emptyset \emptyset 7 .

Nouns can be modified by a sentence with a possessive predicate which contains a noun identical

to the modified noun.(1)

e.g. the NP dooki-n sarkii "the king's horse" is derived from the following underlying structure:



(1) Where this noun is abstract there are certain restrictions in the genitive which are beyond the scope of this thesis.

T6. T-COMPLEMENTIZER PLACEMENT:

SD: X (S) ~~NP~~ Y
 1 2 3

SC: 1 ceewaa 2 3.

A full sentence can be embedded as an object of a verb that takes a sentential object or as a complement after a noun. (cf P.31)

T7. T-EXTRAPOSITION:

SD: X ((S)_{NP} Pred Y)_S
 1 2 3 4

SC: 1 ∅ 3 2 4.

Sentential subjects are extraposed to the right of the predicate. This transformation is obligatory with certain verbs especially those that take subjunctive complement subjects. (cf P.31)

T8. T-PREP DELETION:

SD: X da (ceewaa S)_{NP} Y
 1 2 3 4

SC: 1 ∅ 3 4.

The preposition da "with" in V-prep can be deleted optionally. (cf P.35)

T9. T-COMP DELETION:

SD: X (ceewaa S) NP Y
1 2 3 4 SC: 1 0 3 4.

The complementizer ceewaa can be deleted, optionally in certain cases, obligatorily in others. (cf P.35)

T10. T-EMPH ATTACHMENT:

SD: (Emph Particle X $\left\{ \begin{matrix} \text{NP} \\ \text{VP} \end{matrix} \right\}$ Y) S

1 2 3 4 5

SC: 3 4 1 2 5.

The subject of a sentence can be emphasized by inserting an emphatic particle at its right. Similarly the VP, the object and the various adverbials in a sentence can be emphasized:

52. fulaanii kam, sun kaawoo madaraa kaasuwaaw jiya
bring milk
53. fulaanii sun kaawoo madaraa kasuwaaw kam jiya
54. fulaanii sun kaawoo madaraa kam, kaasuwaaw jiya
55. fulaanii sun kaawoo madaraa kaasuwaaw jiya kam

all meaning the same thing viz "the Fulanis brought milk to the market yesterday", but with emphasis on the item on the left of the emphatic particle kam. The

T11. T-TOPICALIZATION:

SD: (X NP Emph-Particle Y)_S
 1 2 3 4

SC: 2 3 1 4.

Any item which has been emphasized can be front-shifted for extra emphasis:

56. fulaani kām, sun kaawoo madaraa jiya

57. madaraa kām, fulaani sun kawoo (ta) jiya

58. jiya kām, fulaani sun kaawoo madaraa.

"The Fulanis brought milk"

T12. T-Cop Emph:

SD: X (NP {Adj
 1 2 3 4 5
 NP } Cop) S Y

SC: 1 3 4 2 5.

The predicate of a copular sentence can be front shifted for emphasis:

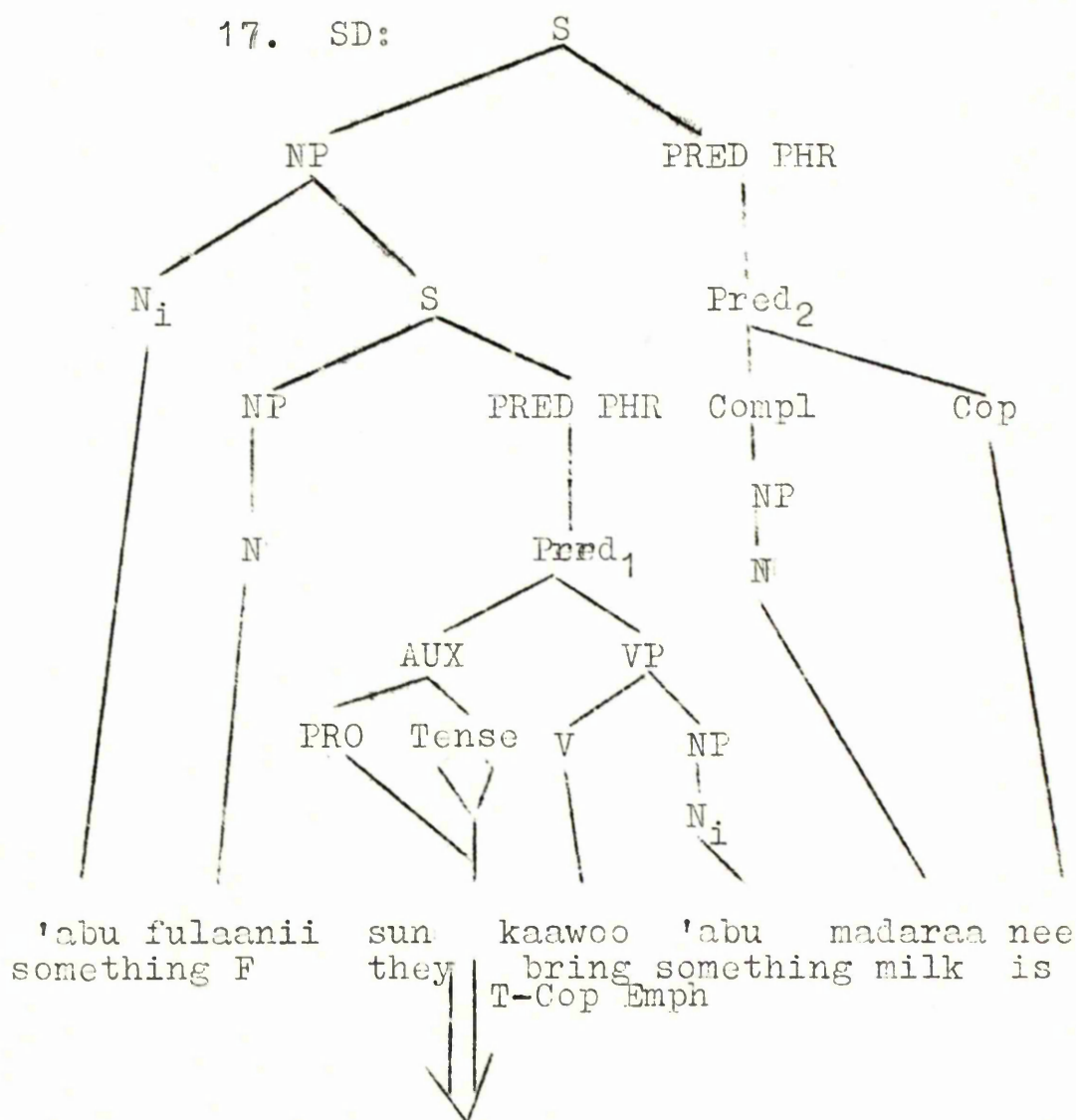
59. Audu sarkii nēe ---> sarkii nēe Audu
 Audu is a king a king is Audu.

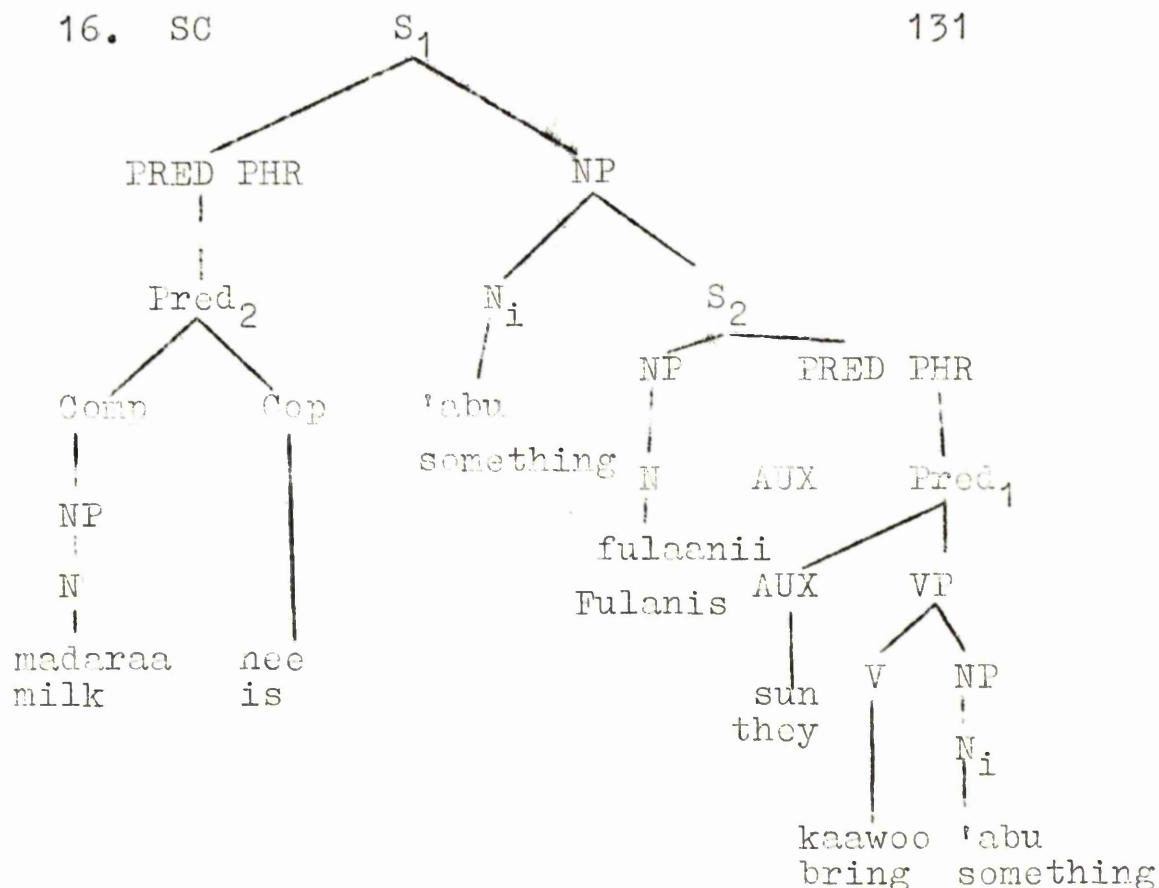
Parsons' B-Type sentences are actually copular

sentences which have undergone this kind of transformation. For example the sentence:

160. madaraa (nee) fulaanii su'ka kaawoo
it was milk that the Fulanis brought.

has the following underlying structure:





T-Relativization (and other relevant transformations) will then apply on the embedded sentence (S₂) to give the following derived structure:

61. mādaráa nēe 'abín dà Fúlàanii sù kà káawóo
milk was the thing which the Fulanis brought.

Then the copula nee and the modified noun together with the relativizer da are deleted by a later transformation⁸ to produce 60.

... not relevant in this context

T13. T-Cop Deletion:

SD: X (NP Compl Cop)_S Y
 1 2 3 4 5
 SC: 1 2 3 ∅ 5.

The copula can be deleted optionally normally in answer to word questions:

62. súnáá nǎá Áúdù nee ----> súnáá nǎá Áúdù
 name my Audu is My name is Audu.

T14. T-NOMINALIZATION₁:

SD: X ((NP AUX V Y S)_{NP}
 1 2 3 4 5
 SC: 1 ∅ ∅ 4 r 2 5.
 NOM

This rule transforms sentences into NP's (cf P.72)

T15. T-NOMINALIZATION₂:

SD: X ((NP AUX (V(da)N)_{VP} Y)_S)_{NP} Z
 1 2 3 4 5 6
 SC: 1 ∅ ∅ 4 GL 2 5 6
 NOM

This rule operates on sentences containing single transitive verbs to turn them into nominals. (cf P.81)

T-16. T-REL NOMINALIZATION:

SD: X ((NP₁ AUX (yi)_V NP₂)_S)_{NP} Y
 1 2 3 4 5 6

SC: 1 [5] da 2 3 4 6.
 +NOM

This rule operates on all types of sentence containing verbal predicates. (cf P.82).

N
APPENDIX C

giving a/
A List of Representative Sample of Verbs with
Their Different Complementation Possibilities:-

- [+ceewaa
+Subjunctive] :-

bukaaci	to need
tiilasta	to force
guji	to avoid
yarda	to agree
tsammanci	to anticipate
daarara	to be anxious
daagee	to insist
neemi	to seek
wajabta	to be necessary

[-ceewaa
-Subjunctive -] :-

daukaa	to assume
zataa	to think
kaddara	to will
saa	to cause
nufa	to intend

[+ceewaa
-Subjunctive] :-

gaya	to tell
kamaata	to behove
luura	to notice
bayyanaa	to explain
tabbata	to be certain
jaddada	emphasize
fahimta	to realize
riska	to cimprehend
tuna	to remember
karfafa	to empasize
ambata	to mention

[-ceewaa
-Subjunctive] :-

hana	to prevent
'iya	to be able to
gaya	to ask
kamata	to behove
soo	to like
kii	to dislike/refuse
gwammace	to regret
wajaba	to be necessary

APPENDIX D.

LIST OF ABBREVIATIONS AND SYMBOLS:

ADV	Adverbial
Adv	Adverb
Excla	Exclamation
Part	Particle
Stat	Stative
Man	Manner
loc	Locative
Compl	Complement
Comp	Complementizer
Cop	Copula
GL	Genitive link
P.P	Past Participle
PP	Prepositional Phrase
Prep	Preposition
ASP	Aspect
Prog	Progressive
---->	Rewrite as
====>	Rewrite as
*	Ungrammatical
(X) _Y	X belongs to the category Y
$\left[\begin{smallmatrix} X \\ +Z \end{smallmatrix} \right]$	X has the feature Z
(X)	X is optional

$\left\{ \begin{array}{c} X \\ Y \end{array} \right\}$

X or Y

/

High tone

\

Low tone

-aa

Long -a vowel

APPENDIX E

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